
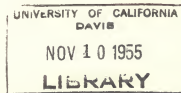


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**CALIFORNIA LETTUCE  
MARKETING CHANNELS AND  
FARM TO RETAIL MARGINS  
1948-1949**

Jerry Foytik



**CALIFORNIA AGRICULTURAL EXPERIMENT STATION  
GIANNINI FOUNDATION OF AGRICULTURAL ECONOMICS**



University of California  
Division of Agricultural Sciences  
Agricultural Experiment Station  
Davis, California

CALIFORNIA LETTUCE--MARKETING CHANNELS AND  
FARM-TO-RETAIL MARGINS, 1948-1949

Jerry Foytik

Giannini Foundation of Agricultural Economics  
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# FOREWORD

This report, on the marketing of lettuce produced and consumed within California, is seventh in a series on the distribution channels and marketing margins involved in moving fresh fruits and vegetables from producing areas to the housewife. The study is one phase of a larger investigation aimed at providing a basis for possible improvements in marketing fresh fruits and vegetables.<sup>1/</sup>

The data used for the report were collected by field visits during the 1948 and 1949 seasons. The over-all study was jointly undertaken in 1948 by the California Agricultural Experiment Station, the California Farm Bureau Federation, and the former Bureau of Agricultural Economics (now in large part in the Agricultural Marketing Service) of the United States Department of Agriculture.

Alex Johnson of the California Farm Bureau, Wendell H. Calhoun and D. B. DeLoach of the Bureau of Agricultural Economics, and Harry R. Wellman and Sidney S. Hoos of the Giannini Foundation participated in planning the over-all investigation and made helpful criticisms and suggestions throughout the study. During its earlier phase the project was under the supervision of Walter D. Fisher, who had responsibility for directing the field work, editing the interview schedules, and preparing the statistical tabulations and summaries.

H. Fisk Phelps, Willard F. Williams, Robert V. Enochian, and George A. Jackson, Jr., all jointly employed by the cooperating agencies, and Eldon Dye, Ralph Rush, and Irwin Rust of the California Farm Bureau were responsible for establishing and maintaining contacts with the trade and collecting and editing the statistical data. The voluminous statistical calculations were performed at Davis, largely by Frieda Dekazos, Margaret Isabella, Shirley Lichtenstein, and Bernice Pfanner.

Finally, this study would have been impossible without the active cooperation of the retail store managers, producer dealers, packers, and growers throughout California who generously furnished the detailed information requested on prices and sources of supply.

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<sup>1/</sup> Previous reports were on:

Fresh Tomatoes, Report No. 113 (June 1951 by W. D. Fisher)  
 Thompson Seedless Grapes, Report No. 115 (June 1951 by Jerry Foytik)  
 Asparagus, Report No. 116 (June 1951 by Jerry Foytik)  
 Celery, Report No. 117 (June 1951 by Jerry Foytik)  
 Carrots, Report No. 118 (July 1951 by Jerry Foytik)  
 Cantaloup, Report No. 179 (September 1955 by Jerry Foytik)

# CHAPTER IV

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## APPENDIX

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CALIFORNIA LETTUCE: Marketing Channels and  
Farm-to-Retail Margins, 1948-1949

by

Jerry Foytik <sup>1/</sup>

INTRODUCTION

Although eastern markets constitute the major outlet for California lettuce, about one sixth of the crop is sold within the state. Only a little lettuce comes into the state, except for substantial quantities arriving from Yuma, Arizona, during the winter months. Thus consumption in California is largely limited to lettuce grown within the state. This volume is an important portion of the total supply of California grown fresh fruits and vegetables sold locally. As in the case of other fresh fruits and vegetables, a variety of marketing methods are employed in moving lettuce from the producer to the housewife.

The major findings of the study are:

1. Lettuce sold in California retail stores comes chiefly from California's Imperial Valley and Yuma, Arizona, during the winter months of December to March. Thereafter the principal sources of supply are Monterey County and adjoining areas, although appreciable quantities come from other producing areas scattered throughout the state.
2. Generally, the lettuce from each producing area moves to nearby consuming markets. During December-March most of the supply retailed in all parts of the state comes from Imperial Valley and Yuma, Arizona, since lettuce produced elsewhere is not yet on the market. During the following eight months retailers in Southern California receive their supply primarily from San Luis Obispo and Santa Barbara counties; Central Valley retailers receive theirs from Monterey and Santa Cruz counties and Sacramento and San Joaquin Valleys; and retailers in Coastal Northern California receive theirs from the San Francisco Bay area.
3. Lettuce is marketed primarily by going from producer to wholesaler to consumer, though appreciable quantities are handled by packers before reaching wholesalers, or by truck-jobbers on the way from wholesalers to retailers. Sales by producers directly to retailers are large in

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<sup>1/</sup> Associate Professor of Agricultural Economics and Associate Agricultural Economist in the Agricultural Experiment Station and on the Giannini Foundation of Agricultural Economics, University of California, Davis, California.



Northern California but small in the south. Very little lettuce is handled by truckers.

4. The relative importance of dealers from whom retailers buy varies principally with geography and city size. About half the lettuce received during April-November by retailers located in the large cities of Coastal Northern California comes from nearby wholesalers, and the other half from producers and packers. Practically all the other lettuce retailed in large cities is received from nearby wholesalers. Small-city retailers in Southern California obtain 75 per cent of their supply from wholesalers in neighboring large cities, and most of the remainder from truck-jobbers. Retailers in small cities of the north receive 30 per cent from large-city wholesalers, 25 per cent from wholesalers in small cities, 30 per cent from truck-jobbers, and 15 per cent from producers and packers.
5. Almost two thirds of the lettuce retailed within California is packed 48 heads per crate, one fourth represents larger heads, and 10 per cent is smaller heads. Small lettuce is marketed throughout the state, whereas the large sizes are sold primarily in Coastal Northern California.
6. Losses from physical waste and spoilage averaged 4.3 heads per crate of 47.1. Thus, about 9.2 per cent of the quantity shipped from producing areas is discarded without reaching consumers.
7. Retailing contributes an important part of the cost of moving lettuce into consumption. About 34 cents of the retail dollar go to cover the retailer's margin--including an allowance for spoilage occurring anywhere within the distributive system but discarded at the retail level.
8. The pre-retail margin is 30 cents of the retail dollar--18 $\frac{1}{4}$  cents goes for packaging, 4 $\frac{1}{4}$  to transportation, and 7 $\frac{1}{2}$  to wholesaling.
9. Thus about 36 cents of the consumer's dollar remain for the grower to cover the costs of producing, harvesting, and field packing lettuce.
10. Variations among stores as to spoilage loss, retail margin, and consumer price are partly explainable by differences in location, size, and type of store. Generally, spoilage losses were appreciably higher in Southern California, in cash-carry stores, and in small stores. Retail margins and consumer prices were lower in the first two categories, but higher for the third.

The information presented is based on material collected by visits to selected retail stores during the period August, 1948, to July, 1949. Retailers selected were California independent and local chain stores

THE FIRST PART OF THE HISTORY OF THE REFORMATION  
OF THE CHURCH OF ENGLAND

THE first thing that was done in the reformation of the church of England was the translation of the Bible into English. This was done by John Wycliffe, who was a Dominican friar and a scholar. He was the first to translate the Bible into English, and his work was the basis for all other translations. His translation was done in the late 14th century, and it was the first time that the Bible was available to the common people in their own language. This was a great step forward, as it allowed people to read and understand the Bible for themselves, rather than relying on the clergy to interpret it for them.

Wycliffe's translation was done in a simple, plain style, and it was very popular. It was the first time that the Bible was available to the common people in their own language, and it was a great step forward. It allowed people to read and understand the Bible for themselves, rather than relying on the clergy to interpret it for them.

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west of the Sierra Nevada Mountains. This excluded restaurants, farmers' roadside stands, national chain stores, and the retail stores in Alpine, Mono, and Inyo counties.

A sample of 66 cities in the more densely populated and accessible areas of the state were visited semi-monthly--a total of twenty-four times. An additional 117 stores in relatively remote regions were visited seven times--approximately once every 6 to 8 weeks. In about 90 per cent of the visits to these stores, lettuce was on display and satisfactory data could be obtained. Thus 2,161 usable field interview schedules were secured--1,537 for Northern California and 624 for Southern California--representing a volume of almost 31,500 crates.

The basic procedure for establishing the facts regarding movement of produce and costs of distribution was to trace each lot of lettuce from the retail store back to the original purchaser. At each point in the distributing system prices and sources of produce were noted. In addition, the retail proprietor or store manager was asked: "How many pounds were thrown away last week due to waste and spoilage?" "What amount was sold last week?" Answers to these questions supplied information on spoilage loss and the weight to be attached to each store in computing certain weighted averages. Geographical location, city size, store size, and store type formed the basis for reclassifying the original schedules into the various sub-groups by which the data were summarized.

The first of the following sections describes the marketing channels involved in bringing lettuce from producers to consumers, including the dealers handling lettuce within the distributive system and the geographic paths along which supplies move. The second section deals with the farm-to-retail margins incurred, including the major cost components and further information on retail and pre-retail margins are included.

The concluding section consists of two appendixes: Appendix A describes the store sample selected, the method followed in collecting the data, and the weighting system used in merging the data from individual schedules to provide reliable averages of spoilage losses, margins, prices, etc. This appendix also presents additional detail about distribution channels and marketing costs. Appendix B defines the geographic areas, dealer types, and store types adopted for the study.







### CHANNELS OF DISTRIBUTION

A description of the channels through which lettuce, as well as other commodities, flows from producers to consumers deals with two separate activities. Produce is first brought together from many producers by various dealers and then dispersed among numerous retail outlets, where housewives make their purchases. Produce also moves from producer to consumer along a variety of geographic paths.

The Dealer Type.--Figure 1 shows the relative importance of the different dealer types handling California-produced lettuce sold through California retail stores (exclusive of national chains). The information is shown separately for the northern and southern parts of the state, as divided by the Tehachapi Mountains. Grower-shippers<sup>1/</sup> handle almost half the lettuce sold at retail in Southern California, and one fifth of the quantity retailed in the north. Other producers (including grower associations) handle the remaining produce.

The principal channel for marketing lettuce is from producer through wholesaler to retailer. Almost all the lettuce retailed in Southern California and three fourths of the quantity sold by northern retailers are handled at one time by wholesalers. Much of this volume, representing 30 per cent of retail sales, passes through packers<sup>2/</sup> on its way to wholesalers. Additional quantities are handled by truck-jobbers<sup>3/</sup> before reaching retailers--20 and 11 per cent in the north and south, respectively. Truckers<sup>4/</sup> are insignificant in the distributive system used for moving lettuce from producers to retailers. Direct marketing, representing sales made directly by producers to retailers, is substantial in Northern California (over 20 per cent of the total volume) but negligible in the south.

Thus retailers in the south obtain seven eighths of their lettuce from wholesalers and one eighth from truck-jobbers. Northern retailers receive three fifths from wholesalers, one fifth from truck-jobbers, and one fifth from producers.

---

<sup>1/</sup> Grower-shippers are producers who operate permanent packing sheds and grow at least half the produce packed in these sheds.

<sup>2/</sup> A packer is defined to exclude producers who do their own packing. See Appendix B.

<sup>3/</sup> Truck-jobbers generally buy a wide variety from wholesalers and resell to retailers along a regular truck route.

<sup>4/</sup> Truckers usually buy a few commodities in the producing areas and resell them to other dealers or to retailers.

## APPENDIX A

1. The first of the two main sections of the Appendix is devoted to a description of the various methods of determining the relative positions of the various points of the plane. This is done by means of a system of coordinates, which is defined by the position of a fixed point, called the origin, and a fixed line, called the axis.

2. The second section is devoted to a description of the various methods of determining the relative positions of the various points of the plane. This is done by means of a system of coordinates, which is defined by the position of a fixed point, called the origin, and a fixed line, called the axis.

3. The third section is devoted to a description of the various methods of determining the relative positions of the various points of the plane. This is done by means of a system of coordinates, which is defined by the position of a fixed point, called the origin, and a fixed line, called the axis.

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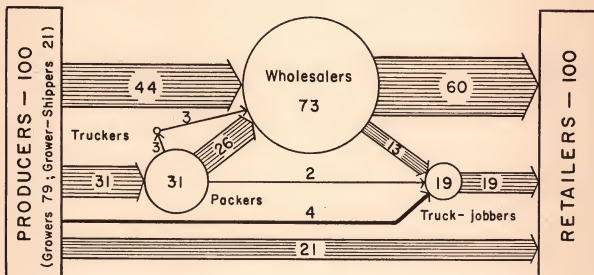
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6. The sixth section is devoted to a description of the various methods of determining the relative positions of the various points of the plane. This is done by means of a system of coordinates, which is defined by the position of a fixed point, called the origin, and a fixed line, called the axis.

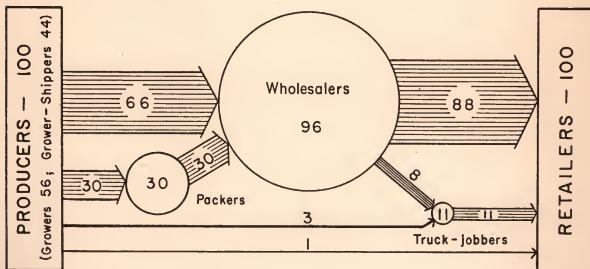
FIGURE 1

Marketing Channels for Lettuce  
Northern California and Southern California, 1948 - 1949

Northern California



Southern California



(Note: All figures expressed as percent of total volume sold at retail)



The relative importance of dealers in supplying lettuce to retailers varies because of several factors. Differences associated with season, city size, and store location are indicated by the data summarized in table 1.

During the winter months, December-March, lettuce supplies come primarily from Imperial Valley and Yuma, Arizona--i.e., from producing areas lying at considerable distances from the principal California consuming markets. As a consequence, retailers obtain only a negligible quantity of their lettuce (2.5 per cent of the total) directly from producers and packers. Truck-jobbers supply large-city retailers with 4 per cent of their lettuce, and small-city retailers with considerably larger proportions: 13 per cent in Southern California and 35 per cent in the north. Thus large-city retailers receive almost their entire supply (95 per cent) from wholesalers. These dealers furnish a much smaller proportion of the lettuce sold in small cities--approximately 80 and 60 per cent, respectively, in the southern and northern parts of the state.

After March the major source of lettuce is from Monterey and adjoining counties. Substantial quantities also come from other northern counties. Since these producing areas are closer to consuming markets than is the case with lettuce marketed during December-March, a different distribution channel is used in moving lettuce to retailers. Retailers now receive less of their lettuce from wholesalers and correspondingly more from producers and packers. Wholesalers furnish 96, 83, and 50 per cent, respectively, of the lettuce sold by retailers in the large cities of Southern California, the Central Valley, and Coastal Northern California--compared to 80, 65, and 45 per cent for small-city retailers in these areas. Approximately 50 and 30 per cent of the lettuce for large-city and small-city retailers, respectively, in Coastal Northern California come from producers and packers. Such direct receipts are small elsewhere in the state, except for retailers in large cities of the Central Valley. Truck-jobbers supply 3 and 24 per cent of the lettuce for retailers in large and small cities, respectively.

The relative volume of retailers' receipts from different dealers varies with lettuce size. Wholesalers furnish 87, 78, and 66 per cent respectively, of the small, medium, and large lettuce handled by California retailers during the year. The proportions coming directly



TABLE 1

Retailers' Source of Lettuce, by Dealer Type<sup>a/</sup> and Season,  
California, 1948-1949

Retail store location <sup>b/</sup>	Producers and packers <sup>c/</sup>	Truckers and trucks jobbers <sup>d/</sup>	Wholesalers in	
			large cities	small cities
1	2	3	4	5
December-March: per cent of all dealer types				
<u>Southern California</u>				
Large cities	0	5.6	94.4	0
Small cities	6.0	13.4	75.4	5.2
All cities	2.1	8.3	87.8	1.8
<u>Central Valley</u>				
Large cities	6.8	3.2	90.0	0
Small cities	1.6	32.3	40.8	25.3
All cities	2.6	27.0	49.7	20.7
<u>Coastal Northern California</u>				
Large cities	3.9	0.5	95.6	0
Small cities	2.3	43.1	26.1	28.5
All cities	3.3	16.9	68.9	10.9
<u>California</u>				
Large cities	1.7	3.7	94.6	0
Small cities	3.5	27.6	50.8	18.1
All cities	2.5	14.3	75.2	8.0
April-July: per cent of all dealer types				
<u>Southern California</u>				
Large cities	0	2.8	97.2	0
Small cities	0.8	14.1	81.6	3.5
All cities	0.3	6.7	91.8	1.2
<u>Central Valley</u>				
Large cities	10.8	4.1	85.1	0
Small cities	8.7	24.7	48.7	17.9
All cities	9.1	21.0	55.3	14.6
<u>Coastal Northern California</u>				
Large cities	55.0	0.1	44.9	0
Small cities	25.7	28.3	19.8	26.2
All cities	43.8	10.9	35.3	10.0
<u>California</u>				
Large cities	19.4	2.0	78.6	0
Small cities	10.1	21.4	54.2	14.3
All cities	15.3	10.6	67.8	6.3

Continued--





Table 1 continued.

Retail store location <sup>b/</sup>	Producers and packers <sup>c/</sup>	Truckers and truck- jobbers <sup>d/</sup>	Wholesalers in	
			large cities	small cities
1	2	3	4	5
	August-November: per cent of all dealer types			
<u>Southern California</u>				
Large cities	0	5.4	94.6	0
Small cities	0.2	23.6	73.5	2.7
All cities	0.1	11.7	87.3	0.9
<u>Central Valley</u>				
Large cities	16.2	3.6	80.2	0
Small cities	3.6	32.0	37.2	27.2
All cities	5.9	26.8	45.0	22.3
<u>Coastal Northern California</u>				
Large cities	43.2	2.6	54.2	0
Small cities	32.5	24.0	22.1	21.4
All cities	39.1	10.8	41.9	8.2
<u>California</u>				
Large cities	15.7	4.3	80.0	0
Small cities	10.0	26.5	47.7	15.8
All cities	13.2	14.1	65.7	7.0

- a/ Classification of persons from whom retailers purchased their supplies.
- b/ See figure 2 for geographic distribution of survey cities and Appendix B for definition of city size.
- c/ Almost the entire quantities indicated were received by retailers from producers.
- d/ Almost the entire quantities indicated were received by retailers from truck-jobbers.



from producers and packers are 4, 8, and 21 per cent. About 13 per cent of the supply of each size is received from truck-jobbers.

Data in table 2 indicate that these proportions vary with the city size and geographic area within which the retail store is located. Generally, large-city retailers secure considerably more of their lettuce of each size from wholesalers than do retailers in small cities--83 per cent compared to 67 per cent--and less from truck-jobbers--4 and 24 per cent, respectively. For either large cities or small cities, wholesalers are most important in supplying lettuce of each size to retailers located in Southern California. They handle a considerably smaller proportion of the lettuce sold by retailers in the Central Valley and still less of the volume marketed by Coastal Northern California retailers. The geographic areas are reversed in relative importance with respect to receipts from producers and packers or from truck-jobbers.

Retailers receive their small lettuce primarily from wholesalers--94 per cent in Southern California and 80 per cent in the north. Most of the remaining supply comes from truck-jobbers. In Coastal Northern California, however, retailers obtain an appreciable quantity (9 per cent) from producers and packers.

In Southern California, retailers secure 90 per cent of their medium sized lettuce from wholesalers and almost 10 per cent from truck-jobbers. These dealers supply 74 and 26 per cent, respectively, of the quantity sold in the Central Valley. Retailers in Coastal Northern California receive 61 per cent from wholesalers, 13 per cent from truck-jobbers, and 26 per cent from producers and packers.

Wholesalers supply 85 and 45 per cent, respectively, of the large lettuce retailed in the southern and northern parts of the state. In the south, retailers obtain an additional 10 per cent from truck-jobbers and 5 per cent from producers and packers--compared to 24 and 24 per cent, respectively, in the Central Valley, and 11 and 46 per cent in Coastal Northern California.

In summary, the volume of lettuce handled by truck-jobbers continues throughout the year at 3 per cent for large-city retailers and at 17 and 32 per cent for retailers in small cities in Southern and Northern California. These percentages are reasonably exact for all lettuce sizes.

Producers and packers sell only a small quantity directly to retailers during the winter months. After March they supply almost



TABLE 2

Retailers' Source of Lettuce, by Dealer Type<sup>a/</sup> and Lettuce Size<sup>b/</sup>,  
California, 1948-1949

Retail store location <sup>c/</sup>	Producers and packers <sup>d/</sup>	Truckers and truck jobbers <sup>e/</sup>	Wholesalers in	
			large cities	small cities
1	2	3	4	5
small size: per cent of all dealer types				
<u>Southern California</u>				
Large cities	0	3.1	96.9	0
Small cities	4.1	7.8	88.1	0
All cities	1.4	4.7	93.9	0
<u>Central Valley</u>				
Large cities	0	3.1	96.9	0
Small cities	0	24.5	51.8	23.7
All cities	0	20.6	60.0	19.4
<u>Coastal Northern California</u>				
Large cities	9.2	0.7	90.1	0
Small cities	8.5	26.6	20.2	44.7
All cities	8.9	10.6	63.3	17.2
<u>California</u>				
Large cities	3.1	2.3	94.6	0
Small cities	3.9	18.4	57.9	19.8
All cities	3.5	9.3	78.4	8.8
medium size: per cent of all dealer types				
<u>Southern California</u>				
Large cities	0	4.6	95.4	0
Small cities	1.0	18.8	76.2	4.0
All cities	0.4	9.5	88.7	1.4
<u>Central Valley</u>				
Large cities	1.1	4.2	94.7	0
Small cities	0.2	30.3	42.9	26.6
All cities	0.3	25.6	52.3	21.8
<u>Coastal Northern California</u>				
Large cities	31.9	2.1	66.0	0
Small cities	14.8	31.3	23.1	30.8
All cities	25.4	13.3	49.5	11.8
<u>California</u>				
Large cities	11.0	3.7	85.3	0
Small cities	4.5	25.9	51.0	18.6
All cities	8.1	13.5	70.1	8.3

Continued--

Statement of the Receipts and Disbursements of the  
Board of Education for the year ending June 30, 1894

Receipts		Disbursements	Balance	Surplus or Deficit
From	Amount	For	Amount	
1. From the State	100,000	2. For Salaries	100,000	
2. From the County	50,000	3. For Fuel	5,000	
3. From the City	25,000	4. For Rent	10,000	
4. From the Board	10,000	5. For Repairs	5,000	
5. From the Public	5,000	6. For Books	2,000	
6. From the Private	2,000	7. For Stationery	1,000	
7. From the Miscellaneous	1,000	8. For Travel	500	
8. From the Unexpended Balance	1,000	9. For Interest	500	
9. From the Other Sources	1,000	10. For Miscellaneous	500	
10. From the Total	195,000	11. Total Disbursements	195,000	
11. From the Total	195,000	12. Balance Forward	195,000	
12. From the Total	195,000	13. Surplus or Deficit	195,000	

Table 2 continued.

Retail store location <sup>c/</sup>	Producers and packers <sup>d/</sup>	Truckers and truck- jobbers <sup>e/</sup>	Wholesalers in	
			large cities	small cities
1	2	3	4	5
	large size: per cent of all dealer types			
<u>Southern California</u>				
Large cities	0	10.1	89.9	0
Small cities	13.3	8.9	70.4	7.4
All cities	4.6	9.7	83.1	2.6
<u>Central Valley</u>				
Large cities	39.9	2.8	57.3	0
Small cities	20.9	28.6	37.1	13.4
All cities	24.3	23.9	40.8	11.0
<u>Coastal Northern California</u>				
Large cities	51.8	0	48.2	0
Small cities	37.2	29.1	20.6	13.1
All cities	46.2	11.2	37.6	5.0
<u>California</u>				
Large cities	20.0	6.2	73.8	0
Small cities	22.2	20.8	46.1	10.9
All cities	21.0	12.7	61.5	4.8

a/ Classification of persons from whom retailers purchased their supplies.

b/ Small size includes lettuce packed more than 48 heads per crate; medium size includes lettuce packed 48 heads per crate; and large size includes lettuce packed less than 48 heads per crate.

c/ See figure 2 for geographic distribution of survey cities and Appendix B for definition of city size.

d/ Almost the entire quantities indicated were received by retailers from producers.

e/ Almost the entire quantities indicated were received by retailers from truck-jobbers.

Date		Description		Amount
Month	Day	Particulars	Balance	
Jan	1	Balance forward		100.00
Jan	5	To Cash	25.00	125.00
Jan	10	By Cash	10.00	115.00
Jan	15	To Cash	30.00	145.00
Jan	20	By Cash	15.00	130.00
Jan	25	To Cash	20.00	150.00
Jan	31	Balance forward		150.00

The above is a statement of the cash account for the month of January 1900. It shows the balance forward, the cash received, and the cash paid. The balance forward is \$100.00, the cash received is \$75.00, and the cash paid is \$25.00. The balance forward is \$150.00.



15 per cent of the total. These sales (90 per cent of the total) are made primarily to retailers in Coastal Northern California, although considerable quantities also go to large-city retailers of the Central Valley. The importance of receipts from producing areas, however, is not adequately indicated by the above averages. Producers and packers supply only a small proportion of the lettuce retailed in Southern California and of the small and medium sizes sold in the Central Valley. Producers and packers, however, are a major source of supply for other lettuce--representing half the large lettuce and a fourth of the medium lettuce sold in Coastal Northern California and a fourth of the large lettuce retailed in the Central Valley. Whenever such direct receipts are substantial, retailers in large cities obtain a considerably larger proportion of their volume from this source than do small-city retailers.

Wholesalers handle the balance of the lettuce delivered to retailers. They supply 95 and 80 per cent of the lettuce received by stores in large and small cities, respectively, in Southern California, compared to 88 and 66 per cent for the Central Valley. In Coastal Northern California, the relative volume coming from wholesalers decreases after the winter months--from 55 to 45 per cent for small-city retailers, and from 80 to 50 per cent for those located in large cities. Large-city retailers in Southern California and the Central Valley receive 95 per cent of their small and medium lettuce from wholesalers. These dealers supply 90 per cent of the small lettuce for small cities in Southern California, the large lettuce for large cities in the south, and the small lettuce for large cities of Coastal Northern California. Their importance as a source for other lettuce varies--down to a figure of 33 per cent for large lettuce sold by small-city retailers of Coastal Northern California.

Most of the lettuce moving from wholesale markets to retail stores comes directly from large-city wholesalers. In the case of small-city retailers, particularly those located in Northern California, an appreciable portion of the lettuce secured from wholesalers comes from those located in small cities. In fact, in Northern California small-city retailers obtain almost as much lettuce from wholesalers located in small cities as those in large cities. Small-city wholesaler's, however, do not appear to provide any of the lettuce retailed in large cities.



Geographic Movement.--Production of California lettuce is centered in the Imperial and Salinas Valleys. Some 22.2 million crates (600,000 tons) were produced in 1948 from 128,000 bearing acres.<sup>1/</sup> The California winter crop, one quarter of the annual production, is grown in Imperial County and the adjoining part of Riverside County. Almost 60 per cent of the acreage in later lettuce is in Monterey County; 30 per cent in the five nearby counties of Santa Cruz, San Luis Obispo, Santa Barbara, San Benito, and Santa Clara; and some 12 per cent in other parts of the state. Table 3 summarizes the bearing acreage data on a county basis.

TABLE 3  
Bearing Acreage of Lettuce, by Counties, California, 1948

County	Spring (early)	Summer	Fall	Winter	Total
Monterey	20,200	14,000	21,650		55,850
Santa Cruz	2,090	1,870	2,250		6,210
San Luis Obispo	1,300	1,000	1,000		3,300
Santa Barbara	3,100	3,100	4,300		10,500
San Benito	3,780	600	1,000		5,380
Santa Clara	650	780	1,600		3,030
Other San Francisco Bay Area <sup>a/</sup>	550	1,050	1,200		2,800
Kern	500	0	600		1,100
Tulare	700	0	2,000		2,700
Fresno	1,000	0	700		1,700
Other Northern California	300	0	600		900
Imperial				30,000	30,000
Riverside			100	2,300	2,400
Other Southern California	1,030	300	700		2,030
California	35,200	22,700	37,700	32,300	127,900

<sup>a/</sup> Includes counties of San Francisco, San Mateo, Alameda and Contra Costa.

Source: California Crop and Livestock Reporting Service, "Vegetable Crops in California", May 1950.

<sup>1/</sup> The 1948 crop is fairly representative of the geographic distribution of lettuce production in California during recent years. In Arizona the 1948 crop (6.9 million crates) was harvested from 13,700 acres planted in Yuma and 28,500 acres in the balance of the state. Appreciable quantities of this lettuce are sold in California, particularly during December-March.



Figure 2 shows the geographic distribution of survey cities and principal producing areas. That information is relevant to the following discussion of the geographic movement of lettuce for sale within each of the three major subdivisions of the state. One must bear in mind that five sixths of the California lettuce crop is shipped to eastern markets. Hence the actual geographic movement of supplies within the state may be substantially different from the pattern suggested by the data in table 2.

The size distribution of lettuce sales for the three major geographic areas appears in table 4. For the state as a whole, 65 per cent of the total sales consists of medium lettuce (packed 48 heads per crate), 24 per cent is larger heads, and 11 per cent is smaller heads. Approximately the same size distribution of sales prevails in the Central Valley. In the other two areas, however, the relative importance of large and medium lettuce is considerably different. Practically no large lettuce is marketed in Southern California--only 2 per cent of the total, compared to 86 and 12 per cent for medium and small sizes. In Coastal Northern California large lettuce is sold in substantial volume--46 per cent, compared to 44 and 10 per cent for medium and small lettuce, respectively. In other words, about 10-12 per cent of the lettuce sold in each area is of small size. Over two thirds of the large lettuce is marketed in Coastal Northern California and most of the remainder in the Central Valley.

TABLE 4  
Size Distribution of Lettuce Sales, by Major Consuming Areas,  
California, 1948-1949

Retail store location <sup>a/</sup>	Size of lettuce <sup>b/</sup>			
	small	medium	large	All
	per cent of sales for consuming area			
Southern California	11.7	86.3	2.0	100.0
Central Valley	10.2	64.6	25.2	100.0
Coastal Northern California	10.6	43.8	45.6	100.0
All California	10.9	64.9	24.2	100.0

<sup>a/</sup> See Appendix B for definition of geographical areas.

<sup>b/</sup> Small size includes lettuce packed more than 48 heads per crate; medium size includes lettuce packed 48 heads per crate; and large size includes lettuce packed less than 48 heads per crate.



FIGURE 2

Geographic Distribution of Survey Cities and Producing Areas









Because of the local nature of production, the general geographic movement of California lettuce sold at retail within the store is largely from Imperial Valley and Yuma, Arizona, during December-March, and from the counties south of San Francisco during the remainder of the season. Actually, an important question requires study: "How does produce reach the retailers?" That is, there needs to be some indication as to the relative importance of the various producing areas from which retailers obtain produce. Data showing the ultimate producer sources of lettuce are summarized in table 5. This information is given separately for three four-month periods.

These data indicate that lettuce from each producing area tends to move to retailers in nearby consuming markets. During the winter months, December-March, 92 per cent of the lettuce sold in Southern California and 85 per cent in the north come from Imperial Valley and Yuma. The remaining supplies are primarily from nearby producing areas: other southern counties for retailers in the south, Sacramento and San Joaquin Valleys for retailers in the Central Valley, and Monterey and Santa Cruz counties for retailers in Coastal Northern California.

As the season advances, there is a change in the relative importance of the producing areas from which lettuce is obtained. After the winter crop is marketed, lettuce comes from producing areas other than Imperial Valley. The relative importance of these producing areas in supplying lettuce to California retailers is shown separately for two four-month periods, April-July and August-November. The tendency for retailers to draw supplies from nearby producing areas is more clear for the second period.

During August-November Southern California retailers obtain 83 per cent of their lettuce from San Luis Obispo and Santa Barbara counties, 12 per cent from Monterey and Santa Cruz counties, and 5 per cent from other areas. About 65 per cent of the lettuce sold by retailers in Coastal Northern California comes from the San Francisco Bay Area, 25 per cent from the four counties immediately to the south (Monterey, Santa Cruz, San Luis Obispo, and Santa Barbara), and 10 per cent from other areas. Retailers in the Central Valley receive 50 per cent of their supply from Monterey and Santa Cruz counties, 25 per cent from San Joaquin and Sacramento Valleys, 14 per cent from San Luis Obispo and Santa Barbara counties, and 11 per cent from the San Francisco Bay Area.



TABLE 5

Retailers' Source of Lettuce, by Producing Area<sup>a/</sup> and Season,  
California, 1948-1949

Retail store location <sup>b/</sup>	Yuma, Arizona	Imperial and Riverside counties	Other Southern California	San Luis Obispo and Santa Barbara counties	Monterey and Santa Cruz counties	San Francisco Bay Area	Other Northern California <sup>c/</sup>
1	2	3	4	5	6	7	8
December-March: per cent of all producing areas							
<u>Southern California</u>							
Large cities	5.4	87.5	4.5	0.8	1.5	0	0.3
Small cities	21.1	67.8	11.1	0	0	0	0
All cities	10.8	80.7	6.8	0.5	1.0	0	0.2
<u>Central Valley</u>							
Large cities	64.1	20.7	0	0	0	0	15.2
Small cities	35.1	54.1	5.3	0.2	0	0	5.3
All cities	40.3	48.1	4.3	0.2	0	0	7.1
<u>Coastal Northern California</u>							
Large Cities	34.1	50.0	0	0	5.8	6.1	4.0
Small cities	23.9	56.8	0	4.5	11.4	0	3.4
All cities	30.2	52.6	0	1.7	7.9	3.8	3.8
<u>California</u>							
Large cities	18.6	70.8	2.7	0.5	2.9	2.1	2.4
Small cities	26.5	60.3	6.2	1.3	3.1	0	2.6
All cities	22.1	66.2	4.2	0.8	3.0	1.2	2.5
April-July: per cent of all producing areas							
<u>Southern California</u>							
Large cities	0	0.5	8.0	70.6	15.9	0	5.0
Small cities	2.7	3.6	7.1	61.0	22.0	0	3.6
All cities	0.9	1.6	7.7	67.3	18.0	0	4.5
<u>Central Valley</u>							
Large cities	12.1	0.8	0	3.0	45.6	7.4	31.1
Small cities	10.3	9.0	2.2	10.3	29.4	12.6	26.2
All cities	10.6	7.5	1.8	9.0	32.3	11.7	27.1

Continued--



Table 5 continued--

Retail store location <sup>b/</sup>	Yuma, Arizona	Imperial and Riverside counties	Other Southern California	San Luis Obispo and Santa Barbara counties	Monterey and Santa Cruz counties	San Francisco Bay Area	Other Northern California <sup>c/</sup>
1	2	3	4	5	6	7	8
April-July: per cent of all producing areas							
<u>Coastal Northern California</u>							
Large	3.2	2.1	0.4	1.2	2.2	81.8	9.1
Small cities	15.7	7.8	1.1	17.6	18.3	28.1	11.4
All cities	8.0	4.3	0.7	7.5	8.4	61.2	9.9
<u>California</u>							
Large cities	1.8	1.1	4.9	43.0	12.9	28.4	7.9
Small cities	8.7	6.5	3.9	32.7	23.4	11.7	13.1
All cities	4.8	3.5	4.5	38.4	17.5	21.0	10.3
August-November: per cent of all producing areas							
<u>Southern California</u>							
Large cities	0	0	1.9	83.4	10.7	0	4.0
Small cities	0	0	1.0	82.1	14.1	0.4	2.4
All cities	0	0	1.6	82.9	11.9	0.1	3.5
<u>Central Valley</u>							
Large cities	0	0	0	5.0	50.7	10.8	33.5
Small cities	0	0	0	15.5	49.5	11.6	23.4
All cities	0	0	0	13.6	49.7	11.5	25.2
<u>Coastal Northern California</u>							
Large cities	0	0	0	0	5.3	86.4	8.3
Small cities	0	0	0.4	19.0	36.6	32.3	11.7
All cities	0	0	0.2	7.3	17.3	65.6	9.6
<u>California</u>							
Large cities	0	0	1.1	50.4	11.2	30.2	7.1
Small cities	0	0	0.5	43.2	31.8	12.7	11.8
All cities	0	0	0.9	47.2	20.3	22.4	9.2

a/ Classification of areas purchasing the lettuce ultimately sold at retail.

b/ See figure 2 for geographic distribution of survey cities and Appendix B for definition of city size.

c/ The entire quantities indicated were received from Sacramento and San Joaquin valleys except for 2.5 and 3.3 included in the figures (9.9 and 9.6) shown for "All cities" of Coastal Northern California during April-July and August-November, respectively.

THE FOLLOWING TABLES SHOW THE RESULTS OF THE 1971 ELECTIONS IN THE SEVERAL DISTRICTS OF THE STATE OF NEW YORK.

TABLE 1. THE RESULTS OF THE 1971 ELECTIONS IN THE SEVERAL DISTRICTS OF THE STATE OF NEW YORK.

TABLE 2. THE RESULTS OF THE 1971 ELECTIONS IN THE SEVERAL DISTRICTS OF THE STATE OF NEW YORK.

TABLE 3. THE RESULTS OF THE 1971 ELECTIONS IN THE SEVERAL DISTRICTS OF THE STATE OF NEW YORK.

TABLE 4. THE RESULTS OF THE 1971 ELECTIONS IN THE SEVERAL DISTRICTS OF THE STATE OF NEW YORK.

DISTRICT	DEMOCRAT	REPUBLICAN	LIBERAL	CONSERVATIVE	PROGRESSIVE	MODERATE	OTHER
1ST DISTRICT	100	0	0	0	0	0	0
2ND DISTRICT	0	0	0	0	0	0	0
3RD DISTRICT	0	0	0	0	0	0	0
4TH DISTRICT	0	0	0	0	0	0	0
5TH DISTRICT	0	0	0	0	0	0	0
6TH DISTRICT	0	0	0	0	0	0	0
7TH DISTRICT	0	0	0	0	0	0	0
8TH DISTRICT	0	0	0	0	0	0	0
9TH DISTRICT	0	0	0	0	0	0	0
10TH DISTRICT	0	0	0	0	0	0	0
11TH DISTRICT	0	0	0	0	0	0	0
12TH DISTRICT	0	0	0	0	0	0	0
13TH DISTRICT	0	0	0	0	0	0	0
14TH DISTRICT	0	0	0	0	0	0	0
15TH DISTRICT	0	0	0	0	0	0	0
16TH DISTRICT	0	0	0	0	0	0	0
17TH DISTRICT	0	0	0	0	0	0	0
18TH DISTRICT	0	0	0	0	0	0	0
19TH DISTRICT	0	0	0	0	0	0	0
20TH DISTRICT	0	0	0	0	0	0	0
21ST DISTRICT	0	0	0	0	0	0	0
22ND DISTRICT	0	0	0	0	0	0	0
23RD DISTRICT	0	0	0	0	0	0	0
24TH DISTRICT	0	0	0	0	0	0	0
25TH DISTRICT	0	0	0	0	0	0	0
26TH DISTRICT	0	0	0	0	0	0	0
27TH DISTRICT	0	0	0	0	0	0	0
28TH DISTRICT	0	0	0	0	0	0	0
29TH DISTRICT	0	0	0	0	0	0	0
30TH DISTRICT	0	0	0	0	0	0	0
31ST DISTRICT	0	0	0	0	0	0	0
32ND DISTRICT	0	0	0	0	0	0	0
33RD DISTRICT	0	0	0	0	0	0	0
34TH DISTRICT	0	0	0	0	0	0	0
35TH DISTRICT	0	0	0	0	0	0	0
36TH DISTRICT	0	0	0	0	0	0	0
37TH DISTRICT	0	0	0	0	0	0	0
38TH DISTRICT	0	0	0	0	0	0	0
39TH DISTRICT	0	0	0	0	0	0	0
40TH DISTRICT	0	0	0	0	0	0	0
41ST DISTRICT	0	0	0	0	0	0	0
42ND DISTRICT	0	0	0	0	0	0	0
43RD DISTRICT	0	0	0	0	0	0	0
44TH DISTRICT	0	0	0	0	0	0	0
45TH DISTRICT	0	0	0	0	0	0	0
46TH DISTRICT	0	0	0	0	0	0	0
47TH DISTRICT	0	0	0	0	0	0	0
48TH DISTRICT	0	0	0	0	0	0	0
49TH DISTRICT	0	0	0	0	0	0	0
50TH DISTRICT	0	0	0	0	0	0	0
51ST DISTRICT	0	0	0	0	0	0	0
52ND DISTRICT	0	0	0	0	0	0	0
53RD DISTRICT	0	0	0	0	0	0	0
54TH DISTRICT	0	0	0	0	0	0	0
55TH DISTRICT	0	0	0	0	0	0	0
56TH DISTRICT	0	0	0	0	0	0	0
57TH DISTRICT	0	0	0	0	0	0	0
58TH DISTRICT	0	0	0	0	0	0	0
59TH DISTRICT	0	0	0	0	0	0	0
60TH DISTRICT	0	0	0	0	0	0	0
61ST DISTRICT	0	0	0	0	0	0	0
62ND DISTRICT	0	0	0	0	0	0	0
63RD DISTRICT	0	0	0	0	0	0	0
64TH DISTRICT	0	0	0	0	0	0	0
65TH DISTRICT	0	0	0	0	0	0	0
66TH DISTRICT	0	0	0	0	0	0	0
67TH DISTRICT	0	0	0	0	0	0	0
68TH DISTRICT	0	0	0	0	0	0	0
69TH DISTRICT	0	0	0	0	0	0	0
70TH DISTRICT	0	0	0	0	0	0	0
71ST DISTRICT	0	0	0	0	0	0	0
72ND DISTRICT	0	0	0	0	0	0	0
73RD DISTRICT	0	0	0	0	0	0	0
74TH DISTRICT	0	0	0	0	0	0	0
75TH DISTRICT	0	0	0	0	0	0	0
76TH DISTRICT	0	0	0	0	0	0	0
77TH DISTRICT	0	0	0	0	0	0	0
78TH DISTRICT	0	0	0	0	0	0	0
79TH DISTRICT	0	0	0	0	0	0	0
80TH DISTRICT	0	0	0	0	0	0	0
81ST DISTRICT	0	0	0	0	0	0	0
82ND DISTRICT	0	0	0	0	0	0	0
83RD DISTRICT	0	0	0	0	0	0	0
84TH DISTRICT	0	0	0	0	0	0	0
85TH DISTRICT	0	0	0	0	0	0	0
86TH DISTRICT	0	0	0	0	0	0	0
87TH DISTRICT	0	0	0	0	0	0	0
88TH DISTRICT	0	0	0	0	0	0	0
89TH DISTRICT	0	0	0	0	0	0	0
90TH DISTRICT	0	0	0	0	0	0	0
91ST DISTRICT	0	0	0	0	0	0	0
92ND DISTRICT	0	0	0	0	0	0	0
93RD DISTRICT	0	0	0	0	0	0	0
94TH DISTRICT	0	0	0	0	0	0	0
95TH DISTRICT	0	0	0	0	0	0	0
96TH DISTRICT	0	0	0	0	0	0	0
97TH DISTRICT	0	0	0	0	0	0	0
98TH DISTRICT	0	0	0	0	0	0	0
99TH DISTRICT	0	0	0	0	0	0	0
100TH DISTRICT	0	0	0	0	0	0	0



Approximately the same pattern of geographic distribution prevails during the four preceding months, April-July. Some supplies, however, arrive from Imperial Valley and Yuma--presumably during the early weeks of this period. These quantities amount to about 2 per cent of the four months' sales in Southern California, and 15 per cent in the north.

To recapitulate, lettuce from Imperial Valley and Arizona is distributed to retailers throughout the state during the period December to March--and possibly early April--while lettuce from other producing areas is not yet available. Supplies produced in other Southern California counties are sold primarily during December to July. They move mainly to retailers in Southern California, and to a lesser extent to small-city retailers in the Central Valley. Production from areas located farther north is retailed during April-November. Some quantities, however, are marketed later, December-March, through Northern California stores.

Lettuce originating in San Luis Obispo and Santa Barbara counties moves primarily to Southern California. Some supplies, however, go to small-city retailers in the north. Monterey and Santa Cruz lettuce is the major supply for the Central Valley. Appreciable quantities also go to other retailers in the state. Production from the Sacramento and San Joaquin Valleys is distributed primarily to retailers in the Central Valley. Supplies produced in the San Francisco Bay Area are sold chiefly in the large cities of Coastal Northern California. Some quantities also go to small-city retailers in this area and to retailers in the Central Valley.

This pattern suggests strongly that cross-hauling is not extensive in distributing lettuce from producer to consumer. The bulk of the lettuce from each producing area goes to nearby large consuming markets. When such supplies are inadequate, however, additional quantities are secured from more distant sources.

Table 6 indicates the relative importance of various production areas in supplying small, medium, and large lettuce sold within the state. There are significant differences. Lettuce produced in Southern California and Yuma, Arizona amounts to 91, 29, and 50 per cent, respectively, of the small, medium, and large lettuce retailed within the state. The percentage figures are 4, 55, and 7 for lettuce from four counties along the central coast (Santa Cruz, Monterey, San Luis Obispo, and Santa Barbara) and 5, 16, and 44 for other producing areas in the north.





TABLE 6

Retailers' Source of Lettuce, by Producing Area<sup>a/</sup> and Lettuce Size,<sup>b/</sup>  
California, 1948-49

Retail store location <sup>c/</sup>	Yuma, Arizona	Imperial and Riverside counties	Other Southern California	San Luis Obispo and Santa Barbara counties	Monterey and Santa Cruz counties	San Francisco Bay Area	Other Northern California <sup>d/</sup>
1	2	3	4	5	6	7	8
small size lettuce: per cent of all producing areas							
<u>Southern California</u>							
Large cities	0	84.3	12.9	2.3	0	0	0.5
Small cities	10.8	63.9	11.3	2.2	0	0	11.8
All cities	3.8	77.2	12.3	2.3	0	0	4.4
<u>Central Valley</u>							
Large cities	71.6	28.4	0	0	0	0	0
Small cities	35.4	47.0	15.0	2.6	0	0	0
All cities	42.0	43.6	12.3	2.1	0	0	0
<u>Coastal Northern California</u>							
Large cities	21.4	64.0	0	0	0	8.4	6.2
Small cities	38.6	40.5	0	14.6	6.3	0	0
All cities	28.0	55.0	0	5.6	2.4	5.2	3.8
<u>California</u>							
Large cities	11.4	74.2	7.7	1.4	0	2.9	2.4
Small cities	26.4	52.0	9.5	5.7	1.7	0	4.7
All cities	18.1	64.4	8.5	3.3	0.7	1.6	3.4
medium size: per cent of all producing areas							
<u>Southern California</u>							
Large cities	2.0	23.0	2.8	57.8	10.9	0	3.5
Small cities	6.3	10.7	2.3	62.5	17.2	0.1	0.9
All cities	3.5	18.7	2.6	59.4	13.1	0	2.7
<u>Central Valley</u>							
Large cities	21.8	3.8	0	4.7	57.8	3.0	8.9
Small cities	12.8	17.4	1.2	14.4	44.0	3.4	6.8
All cities	14.4	14.9	1.0	12.7	46.5	3.3	7.2

Continued--



Table 6 continued--

Retail store location <sup>a/</sup>	Yuma, Arizona	Imperial and Riverside counties	Other Southern California	San Luis Obispo and Santa Barbara counties	Monterey and Santa Cruz counties	San Francisco Bay Area	Other Northern California <sup>d/</sup>
1	2	3	4	5	6	7	8
medium size: per cent of all producing areas							
<u>Coastal Northern California</u>							
Large cities	17.2	14.1	0.4	1.3	7.4	48.7	10.9
Small cities	16.3	22.0	0.8	26.8	18.3	10.5	5.3
All cities	16.9	17.1	0.6	11.1	11.6	34.0	8.7
<u>California</u>							
Large cities	8.3	18.9	1.8	35.4	12.4	16.9	6.3
Small cities	11.1	15.9	1.5	37.1	26.3	4.0	4.1
All cities	9.6	17.5	1.7	36.2	18.6	11.1	5.3
large size: per cent of all producing areas							
<u>Southern California</u>							
Large cities	0	0	94.4	5.6	0	0	0
Small cities	0	34.9	65.1	0	0	0	0
All cities	0	12.1	84.2	3.7	0	0	0
<u>Central Valley</u>							
Large cities	0	0	0	0	0	17.5	82.5
Small cities	0.9	0.2	0	0	2.8	29.1	67.0
All cities	0.7	0.2	0	0	2.3	27.0	69.8
<u>Coastal Northern California</u>							
Large cities	0.5	0	0	0	2.1	92.3	5.1
Small cities	0	0	0.3	0	34.3	47.2	18.2
All cities	0.3	0	0.1	0	14.4	75.0	10.2
<u>California</u>							
Large cities	0.2	0	56.7	3.3	0.7	32.6	6.5
Small cities	0.3	14.1	26.3	0	10.2	22.2	26.9
All cities	0.2	6.2	43.2	1.9	4.9	28.0	15.6

a/ Classification of areas purchasing the lettuce ultimately sold at retail.

b/ Small size includes lettuce packed more than 48 heads per crate; medium size includes lettuce packed 48 heads per crate; and large size includes lettuce packed less than 48 heads per crate.

c/ See figure 2 for geographic distribution of survey cities and Appendix B for definition of city size.

d/ The entire quantities indicated were received from Sacramento and San Joaquin valleys except for 0.6 and 5.0 included in the figures (8.7 and 10.2) shown for "All cities" of Coastal Northern California for medium and large sizes, respectively.

1. The following information is being furnished to you for your information only. It is not intended to be used for any other purpose.
2. The information is being furnished to you for your information only. It is not intended to be used for any other purpose.
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5. The information is being furnished to you for your information only. It is not intended to be used for any other purpose.

Item	1970	1971	1972	1973	1974	1975	1976
1. Total	100	100	100	100	100	100	100
2. Subtotal	95	95	95	95	95	95	95
3. Subtotal	90	90	90	90	90	90	90
4. Subtotal	85	85	85	85	85	85	85
5. Subtotal	80	80	80	80	80	80	80
6. Subtotal	75	75	75	75	75	75	75
7. Subtotal	70	70	70	70	70	70	70
8. Subtotal	65	65	65	65	65	65	65
9. Subtotal	60	60	60	60	60	60	60
10. Subtotal	55	55	55	55	55	55	55
11. Subtotal	50	50	50	50	50	50	50
12. Subtotal	45	45	45	45	45	45	45
13. Subtotal	40	40	40	40	40	40	40
14. Subtotal	35	35	35	35	35	35	35
15. Subtotal	30	30	30	30	30	30	30
16. Subtotal	25	25	25	25	25	25	25
17. Subtotal	20	20	20	20	20	20	20
18. Subtotal	15	15	15	15	15	15	15
19. Subtotal	10	10	10	10	10	10	10
20. Subtotal	5	5	5	5	5	5	5
21. Subtotal	0	0	0	0	0	0	0
22. Subtotal	0	0	0	0	0	0	0
23. Subtotal	0	0	0	0	0	0	0
24. Subtotal	0	0	0	0	0	0	0
25. Subtotal	0	0	0	0	0	0	0
26. Subtotal	0	0	0	0	0	0	0
27. Subtotal	0	0	0	0	0	0	0
28. Subtotal	0	0	0	0	0	0	0
29. Subtotal	0	0	0	0	0	0	0
30. Subtotal	0	0	0	0	0	0	0
31. Subtotal	0	0	0	0	0	0	0
32. Subtotal	0	0	0	0	0	0	0
33. Subtotal	0	0	0	0	0	0	0
34. Subtotal	0	0	0	0	0	0	0
35. Subtotal	0	0	0	0	0	0	0
36. Subtotal	0	0	0	0	0	0	0
37. Subtotal	0	0	0	0	0	0	0
38. Subtotal	0	0	0	0	0	0	0
39. Subtotal	0	0	0	0	0	0	0
40. Subtotal	0	0	0	0	0	0	0
41. Subtotal	0	0	0	0	0	0	0
42. Subtotal	0	0	0	0	0	0	0
43. Subtotal	0	0	0	0	0	0	0
44. Subtotal	0	0	0	0	0	0	0
45. Subtotal	0	0	0	0	0	0	0
46. Subtotal	0	0	0	0	0	0	0
47. Subtotal	0	0	0	0	0	0	0
48. Subtotal	0	0	0	0	0	0	0
49. Subtotal	0	0	0	0	0	0	0
50. Subtotal	0	0	0	0	0	0	0
51. Subtotal	0	0	0	0	0	0	0
52. Subtotal	0	0	0	0	0	0	0
53. Subtotal	0	0	0	0	0	0	0
54. Subtotal	0	0	0	0	0	0	0
55. Subtotal	0	0	0	0	0	0	0
56. Subtotal	0	0	0	0	0	0	0
57. Subtotal	0	0	0	0	0	0	0
58. Subtotal	0	0	0	0	0	0	0
59. Subtotal	0	0	0	0	0	0	0
60. Subtotal	0	0	0	0	0	0	0
61. Subtotal	0	0	0	0	0	0	0
62. Subtotal	0	0	0	0	0	0	0
63. Subtotal	0	0	0	0	0	0	0
64. Subtotal	0	0	0	0	0	0	0
65. Subtotal	0	0	0	0	0	0	0
66. Subtotal	0	0	0	0	0	0	0
67. Subtotal	0	0	0	0	0	0	0
68. Subtotal	0	0	0	0	0	0	0
69. Subtotal	0	0	0	0	0	0	0
70. Subtotal	0	0	0	0	0	0	0
71. Subtotal	0	0	0	0	0	0	0
72. Subtotal	0	0	0	0	0	0	0
73. Subtotal	0	0	0	0	0	0	0
74. Subtotal	0	0	0	0	0	0	0
75. Subtotal	0	0	0	0	0	0	0
76. Subtotal	0	0	0	0	0	0	0
77. Subtotal	0	0	0	0	0	0	0
78. Subtotal	0	0	0	0	0	0	0
79. Subtotal	0	0	0	0	0	0	0
80. Subtotal	0	0	0	0	0	0	0
81. Subtotal	0	0	0	0	0	0	0
82. Subtotal	0	0	0	0	0	0	0
83. Subtotal	0	0	0	0	0	0	0
84. Subtotal	0	0	0	0	0	0	0
85. Subtotal	0	0	0	0	0	0	0
86. Subtotal	0	0	0	0	0	0	0
87. Subtotal	0	0	0	0	0	0	0
88. Subtotal	0	0	0	0	0	0	0
89. Subtotal	0	0	0	0	0	0	0
90. Subtotal	0	0	0	0	0	0	0
91. Subtotal	0	0	0	0	0	0	0
92. Subtotal	0	0	0	0	0	0	0
93. Subtotal	0	0	0	0	0	0	0
94. Subtotal	0	0	0	0	0	0	0
95. Subtotal	0	0	0	0	0	0	0
96. Subtotal	0	0	0	0	0	0	0
97. Subtotal	0	0	0	0	0	0	0
98. Subtotal	0	0	0	0	0	0	0
99. Subtotal	0	0	0	0	0	0	0
100. Subtotal	0	0	0	0	0	0	0

Small lettuce comes primarily from Imperial Valley and Yuma--only one sixth of the total sold in California being produced elsewhere. Retailers in Southern California and in the Central Valley obtain most of their remaining supply from other producing areas of the south. Additional supplies for Coastal Northern California stores come from San Luis Obispo and Santa Barbara counties.

Generally, consuming markets obtain their large lettuce from nearby producing areas. Southern California retailers receive 12 per cent from Imperial Valley and Yuma, and 84 per cent from other southern counties. For the Central Valley, about 70 per cent is from Sacramento and San Joaquin Valleys and 27 per cent from the San Francisco Bay Area. Retailers in Coastal Northern California obtain 75 per cent of their large lettuce from the San Francisco Bay Area, 15 per cent from Monterey and Santa Cruz counties, 5 per cent from the Sacramento and San Joaquin Valleys, and 5 per cent from other areas in the north.



FARM-TO-RETAIL MARGINS

The producer, the retailer, and any intervening dealer each receives a portion of the final price paid by the housewife for lettuce. Certain physical losses through wastage and spoilage occur during the process of moving produce from producer to consumer. Both these aspects of the distributing problem are to be considered briefly below.

In this description, the term "margin" refers to the difference between the price paid by the handler for produce (delivered to his premises) and the price received by the same handler (f.o.b. his premises). If the handler performs the transportation function, an estimate for this cost is deducted. Thus, "margin" refers to the charges made--rather than to the sum of expenses incurred for labor, rent, depreciation, etc.

Main Cost Components.--California consumers paid an average price of 11.8 cents per head of lettuce purchased at retail during the survey period. One third of the consumer's dollar was accounted for by the retailer's margin--to reimburse the retailer's expenses and to compensate for spoilage occurring anywhere within the distributive system but discarded at the retail level. Somewhat less than a third covered all other distributive charges incurred for packing, transporting, and wholesaling. The some 36 per cent remaining was returned to growers to cover their production and harvesting costs.

The average crate leaving the farm contains 47.1 heads of lettuce, including 42.8 sold to consumers and 4.3 non-salable at retail because of spoilage. The spoilage loss includes both lettuce thrown away during unpacking and that later spoiled or damaged at the store. The wasted produce is not deducted from the retailer's purchases in figuring his margin and must, therefore, be considered as a retailing expense.

Of the pre-retail distribution margin, three fifths (61 per cent) consisted of charges for "packing and containers". This item includes the cost of containers, hauling to the packing sheds, packaging (whether by packer or by grower) and net profit to the packer. One fourth was accounted for by the "wholesaling margin," which includes all charges, fees, commissions, and net profit by the dealers between packer and retailer. "Transportation"--approximately one seventh (14 per cent) of the pre-retail marketing charges--is considered as a separate item regardless of who performs the function.



THE BIRTH OF THE NATION

The first of the three great periods of American history is the period of the Revolution and the formation of the Constitution. This period is the most important in our history, for it is the period when we became a nation. The second period is the period of the Westward Expansion, when we moved from the Atlantic to the Pacific. The third period is the period of the Civil War and Reconstruction, when we fought to preserve the Union and to abolish slavery. The fourth period is the period of the Industrial Revolution, when we became a great power. The fifth period is the period of the Progressive Era, when we began to reform our society. The sixth period is the period of the World Wars, when we became a world power. The seventh period is the period of the Cold War, when we fought against the Soviet Union. The eighth period is the period of the Vietnam War, when we fought in Southeast Asia. The ninth period is the period of the Watergate Scandal, when we fought against corruption. The tenth period is the period of the AIDS crisis, when we fought against a deadly disease. The eleventh period is the period of the Gulf War, when we fought against Iraq. The twelfth period is the period of the Clinton impeachment, when we fought against a corrupt president. The thirteenth period is the period of the 9/11 attacks, when we fought against terrorism. The fourteenth period is the period of the Iraq War, when we fought against Saddam Hussein. The fifteenth period is the period of the financial crisis, when we fought against a global economic collapse. The sixteenth period is the period of the Obama presidency, when we fought against the legacy of George W. Bush. The seventeenth period is the period of the Trump presidency, when we fought against the legacy of Barack Obama. The eighteenth period is the period of the Biden presidency, when we fought against the legacy of Donald Trump. The nineteenth period is the period of the current administration, when we fight against the challenges of the twenty-first century.



"Farm price" is the residual obtained by subtracting the retail and pre-retail margins from the price charged consumers. It is specified at the farm gate in order to include the amount received by growers for harvested but unpacked lettuce. When field packing was performed, however, these packing costs were included in the farm price.

Distribution of consumers' expenditures among these cost categories is pictured in figure 3. The three blocks (proportional to the percentage distribution of retail price) on the left indicate the major recipients of the consumer's expenditure (\$5.04) for a crate of lettuce leaving the farm. The physical distribution of the 47.1 heads between the housewife and the garbage can is shown on the right.

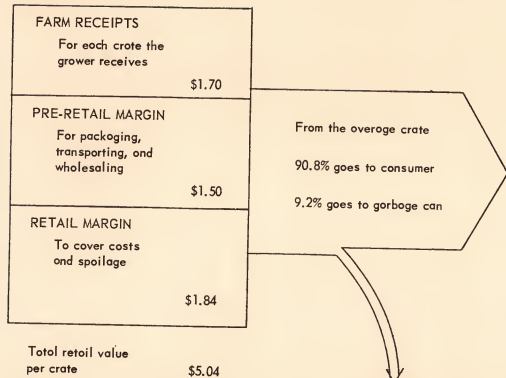
The data used in constructing figure 3 are presented in table 7. From the average crate, 42.8 heads of lettuce (90.8 per cent of the original crate) were sold at retail for 11.8 cents per head, and 4.3 heads (9.2 per cent) were unsalable because of spoilage. In other words, one head must be discarded by the retailer for each ten he sells to his consumers. The retail value of the 42.8 heads sold to consumers (\$5.04) is prorated between actual sale (90.8) per cent and spoilage waste. The last column shows the percentage distribution of total cost incurred in moving one crate of lettuce through the entire channel from producer to housewife. These figures correspond to "per cent of the consumer's dollar" as the term is used by the Agricultural Marketing Service, U.S.D.A.

Retail Margins.---As might be expected, there is considerable variation among stores as to retail margins, spoilage losses, and consumer prices. Appendix table A-3 presents these data for the survey stores, classified according to geographic location, store size, and store type. Comparable data for selected broader store groupings are summarized in table 8. Examination of this information indicates that location, size, and type of store provide only a partial explanation for differences in margins, spoilage, and prices.

Retail margins usually are lower in Southern California, cash-carry stores, and small cities than in Northern California, credit-delivery stores, and large cities, respectively. Losses from waste and spoilage tend to be higher in Southern California, cash-carry stores, small stores, and (to less degree) large cities than in Northern California, credit-delivery stores, large stores, and small cities, respectively. Generally,



FIGURE 3  
Distribution of Total Retail Value of Lettuce  
California, 1948-1949



4.3 heads entering the retail store are, or become, unsalable due to spoilage



42.8 heads entering the retail store are sold at 11.8 cents per head (for a retail value of \$5.04)

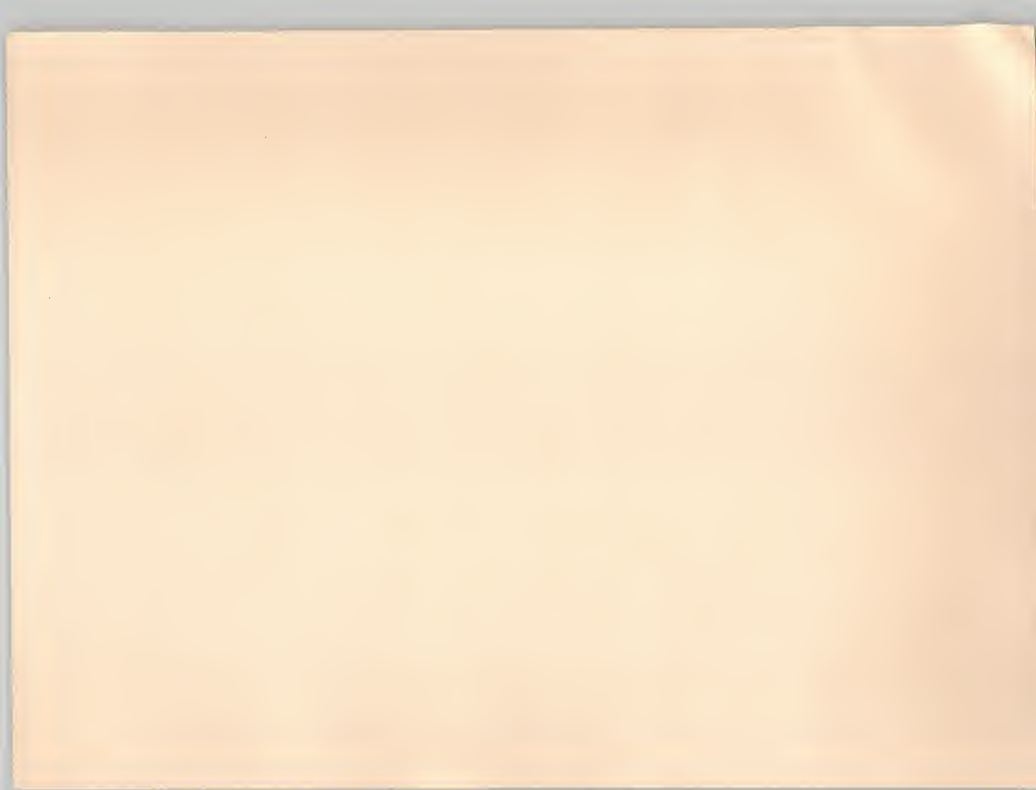


TABLE 7

Main Cost Components for Lettuce,  
California, 1948-1949

Item	Costs for 42.8 heads sold at retail (90.8% of the original crate)	Costs for 4.3 heads not sold due to spoilage a/ (9.2% of crate)	Total costs (42.8 heads leaving the farm and 4.3 heads sold at retail)	Percentage distribution of costs for 47.1 heads leaving the farm
1	2	3	4	5
	dollars per crate (of 47.1 heads)		leaving the farm	per cent
Farm price (at farm gate) b/	1.671	.169	1.84	36.6
Packing and container	.835	.085	.92	18.2
Transportation	.191	.019	.21	4.2
Wholesaling margin	<u>.336</u>	<u>.034</u>	<u>.37</u>	<u>7.3</u>
Pre-retail margin	1.362	.138	1.50	29.7
Retail margin	<u>1.543</u>	<u>.157</u>	<u>1.70</u>	<u>33.7</u>
Total	4.576	.464	5.04	100.0
Retail price (cents per lb) c/			11.8	

a/ Physical losses through waste and spoilage.

b/ Includes harvesting costs but excludes packing cost unless performed in the field.

c/ Retail price to the consumer: Total cost (\$5.04) divided by volume of sales (47.1 heads).

4. Average length of the longest (most) and shortest (least) stems  
 5. Average diameter of the top of the stems (measured at the widest part)  
 6. Average number of leaves per stem

Stem Length (cm)		Stem Diameter (cm)		Leaves per Stem	
Longest	10.0	1.0	1.0	1.0	1.0
Shortest	5.0	0.5	0.5	0.5	0.5
Average	7.5	0.75	0.75	0.75	0.75
Standard Deviation	2.5	0.25	0.25	0.25	0.25
Standard Error	0.5	0.05	0.05	0.05	0.05
95% Confidence Interval	6.5 - 8.5	0.65 - 0.85	0.65 - 0.85	0.65 - 0.85	0.65 - 0.85

These data were collected from a sample of 100 stems.

TABLE 8

Spoilage Loss, Retail Price, and Retail Margin for Lettuce Sold at Retail,  
by Selected Store Groupings, California, 1948-1949

Store type and area a/ 1	Store visits b/ 2 number	Volume reported c/ 3 crates	Average spoilage loss d/ 4 per cent	Average retail price 5 cents per pound	Retail margin	
					average e/ 6	as per cent of price f/ 7 per cent
<u>All store types</u>						
California	2,161	31,435	9.2	11.8	4.0	34
Southern California	624	11,667	10.0	11.6	3.7	32
Northern California	1,537	19,768	8.2	12.0	4.3	36
<u>By store types (all California)</u>						
Credit-delivery stores	1,031	8,638	7.6	12.7	4.4	35
Cash-carry stores	1,130	22,797	8.7	11.2	3.9	35
Large stores	1,369	27,203	8.7	11.4	3.9	34
Small stores	762	4,232	9.7	12.2	4.0	33
Stores in large cities	1,072	20,569	9.3	11.6	4.2	36
Stores in small cities	1,089	10,866	9.0	12.0	3.7	31
<u>Metropolitan Los Angeles and San Francisco g/</u>						
Credit-delivery stores	272	2,886	8.2	13.2	5.2	39
Cash-carry stores	522	14,298	9.0	11.4	4.2	37
<u>Sacramento, Stockton, and Fresno</u>						
Large fruit and vegetable stores	30	497	16.6	11.7	3.3	28
Large grocery and small stores	248	2,888	7.2	11.3	3.7	33
<u>Small cities (all store types)</u>						
Southern California	223	3,251	10.4	11.3	3.1	28
Northern California	866	7,615	8.0	12.5	4.0	32

a/ See Appendix B for definitions of store types and areas.

b/ Number of usable field schedules collected on separate visits to retail stores (excluding reports with inadequate data and visits which indicated that no lettuce was sold).

c/ Quantity sold during the "last week" (i.e., the week prior to the date of fieldman's visit).

d/ Proportion of lettuce thrown away during the week due to waste or spoilage.

e/ Difference between the retail selling price and the retailer's purchase price.

f/ Computed from unrounded data and may differ from Col (6) divided by Col (5).

g/ Including San Bernardino, San Diego, and San Jose.

Note: See Appendix table A-3 for data on original store groupings.





prices paid by consumers tend to be considerably lower in Southern California and in large cities than in the north and in small cities.

This generalization concerning differences suggests that variations in retail margins are related to differences in consumer prices and possibly to differences in spoilage. Apparently changes of 1 cent in retail margins are associated with changes of 2 cents, in the same direction, in consumer prices. There is a less-definite, negative relationship between retail margins and spoilage losses, indicating some tendency for greater spoilage to be associated with lower margins.

Pre-retail margins.--The spread between the price paid to farmers and the price paid by retailers consists of the wholesaling margins, transportation charges, and packing and container costs. The relative importance of these three segments of the pre-retail marketing margin has already been indicated. It may be well, however, to supplement the preceding summary information with additional detail for the three sets of data used in deriving the figures shown in table 7.

Wholesaling margins, given in table 9, averaged 36 cents per crate for wholesalers, 29 cents for truck-jobbers, and 11 cents for truckers.<sup>1/</sup> Possibly the most striking fact revealed by these figures is the considerable variation in wholesalers' margins. The difference between the wholesaler's selling and purchase price is highest in metropolitan Los Angeles. It is somewhat lower in the small cities of the state, and about one third lower in metropolitan San Francisco.

Table 10 summarizes packing and container costs for lettuce, whether incurred by growers, grower-shippers, or by separate packers. Such costs are only slightly lower for grower-shippers in Imperial and Yuma than for packers. In the other producing areas, however, they are approximately one half and one fourth lower for growers and grower-shippers, respectively, than for packers. These data exclude harvesting and field-packing costs. Management income (net profit) is included for packers but not for growers and grower-shippers.

Costs incurred for transportation services averaged 21.1 cents per crate for the state as a whole. Such charges were considerably higher in Southern California than north of the Tehachapi Mountains--28.6 compared to 13.1 cents.

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<sup>1/</sup> The wholesaling margin of 37 cents indicated in table 7 represents the total cost for the wholesaling function. For many lots it includes handling by two or more dealers. Data in table 9, on the other hand, indicate the average cost for individual transactions.



TABLE 9

Wholesaling Margin<sup>a/</sup> for Lettuce,  
California, 1948-1949

Dealer type and area	Margin (per crate of 47.1 heads) cents
<u>Wholesaler</u>	
Metropolitan Los Angeles	42.0
San Bernardino and San Diego	31.4
Metropolitan San Francisco and San Jose	29.0
Sacramento, Stockton and Fresno	34.0
Small cities	35.7
All California	35.9
<u>Truck-jobber</u>	
Southern California	25.8
Northern California	30.7
All California	28.8
<u>Trucker</u>	
Northern California	10.9

a/ Includes all charges, commissions, and brokerage fees, except transportation charges. When transportation was performed by the dealer himself, an estimate of this cost was made and deducted from the total margin.

TABLE 10

Packing and Container Costs<sup>a/</sup> for Lettuce,  
California, 1948-1949

Producing area	Growers	Grower- Shippers	Packers
	cents per crate (of 47.1 heads)		
San Francisco Bay	37.6	63.5	88.6
Monterey-Santa Cruz	90.1	82.7	106.6
San Luis Obispo-Santa Barbara	79.8	81.3	101.3
Sacramento Valley	37.8	87.0	---
North San Joaquin Valley	32.8	---	100.0
South San Joaquin Valley	40.2	96.5	123.7
South Coast	49.2	90.1	121.1
Imperial Valley	80.0	130.1	134.5
Palo Verde Valley	---	---	130.0
Yuma, Arizona	---	121.2	123.7
All California	42.3	113.4	117.4

a/ Excludes harvesting costs and costs for field packing. Management income (net profit) is included for packers but excluded for growers and grower-shippers.



APPENDIX A: PROCEDURES USED

The Store Sample: To obtain reliable information on channels of distribution and marketing costs, the sample of retail stores to be chosen was subjected to various controls--distribution of California population, income distribution within cities, store size, and type of store. In selecting the individual stores to be included particular attention was given to two considerations. It was desired to represent the entire geographic area of the state, exclusive of Alpine, Mono, and Inyo counties. This meant that stores located reasonably near main highways were chosen as a means of effectively utilizing the available time of the fieldmen doing the actual interviewing. In passing it should be noted that cities near major highways besides being conveniently located tend to be larger and, therefore, that more stores from such towns normally would be included in the sample. Secondly, the sample had to be limited to stores from which the required data would be given voluntarily and quickly because such information had to be secured directly from the store proprietor or manager. Actually very few of the stores contacted refused cooperation.

Furthermore, since distributive channels were to be determined and described, certain sampling rates were deliberately introduced. For example, remote geographic areas, including mostly small stores, were included, even though certain time periods were over-represented by this procedure. Yet in this way additional information was secured on channels of distributions--that probably are not functions of time. Limitation of time and personnel precluded collection of data in remote and sparsely settled areas of the state as frequently as in the more accessible areas. It was also felt that more effort should be spent in obtaining information on sources of supply and channels of distribution for retail stores in sparsely settled areas because there is likely to be a wider range of types of channels used in these regions.

Accordingly, two sets of retail stores were used. One, called the intensive sample, covered a smaller area and was visited twice a month. The other, designated the extensive sample, covered a wider area and was visited once every six weeks. Figure 2 of the text shows the geographic distribution of the 101 survey cities segregated into

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three groups (Southern California, Coastal Northern California, and Central Valley region) for which separate interview routes were established. The cities and the number of retail stores included in the intensive and extensive samples of each of these three areas are listed separately in table A-1. These localities are arranged in the approximate order in which the successive stores were visited by the field representative in making his periodic visits.

A total of 66 retail stores in 22 cities was included in the intensive sample. Of these, 20 were located in Metropolitan San Francisco, 11 in Metropolitan Los Angeles, 19 in other large cities (with populations in excess of 50,000 inhabitants), and 16 in small cities.<sup>1/</sup> The extensive sample of 79 cities contained 117 retail stores. Only 5 of these stores were in large cities (Burbank and Glendale).

Stores located in Alpine, Mono, and Inyo counties and all farmers' roadside stands and restaurants were excluded. In addition, it was decided to not gather information from stores belonging to national chain store systems. Members of local chain store organizations, however, were included in the study.

On the basis of supplemental information collected, each store was classified according to its geographic location, volume of sales, and type in order to permit a determination of whether significant differences in prices, margins, and spoilage exist for different sub-groups. Store size was determined according to sales of all fresh fruits and vegetables during 1948. Stores with sales of fresh fruits and vegetables in excess of \$25,000 were classed as large stores; small stores included those with a lesser volume of sales. In addition, information was gathered to permit classifying each establishment as (1) an independent or a (local) chain store, (2) a fruit and vegetable or a grocery store, and (3) a credit-delivery or a cash-carry store.

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<sup>1/</sup> See Appendix B for definitions of city size, store types, and other terms.







TABLE A-1

## Number and Location of the Sample Retail Stores

Area and city	Number stores	Area and city	Number stores	Area and city	Number stores
Intensive sample (visited twice each month, August 1948-July 1949)					
<u>Southern California</u>		<u>Central Valley</u>		<u>San Francisco Bay Area</u>	
Los Angeles	7	Sacramento	5	San Francisco	10
Pasadena	2	Roseville	2	Oakland	5
Long Beach	2	Placerville	2	Berkeley	5
Santa Ana	1	Stockton	3	Palo Alto	2
San Bernardino	2	Tracy	1	San Jose	2
Riverside	2	Oakdale	1	Total	24
Escondido	1	Modesto	2		
San Diego	3	Merced	2		
Total	20	Fresno	2	Grand Total	66
		Total	22	(for 22 cities)	
Extensive sample (visited seven times, during August 1948-July 1949)					
<u>Southern California</u>		<u>San Joaquin Valley</u>		<u>Central Coast</u>	
Ventura	2	Rio Vista	1	San Martin	1
Oxnard	1	Walnut Grove	1	Gilroy	1
Santa Paula	1	Galt	1	Hollister	2
San Fernando	2	San Andreas	1	Santa Cruz	3
Burbank	2	Sonora	1	Watsonville	3
Glendale	3	Turlock	1	Salinas	2
Banning	1	Gustine	1	Seaside	1
Corona	1	Los Banos	1	Monterey	1
Elsinore	1	Madera	2	Carmel	1
Fallbrook	1	Coalinga	1	Gonzales	1
Oceanside	1	Reedley	2	King City	1
Ramona	1	Dinuba	2	Paso Robles	2
Jacumba	1	Visalia	3	Atascadero	2
El Centro	2	Exeter	1	Santa Margarita	1
Brawley	2	Lindsay	1	San Luis Obispo	2
Indio	2	Porterville	2	Arroyo Grande	1
Total	24	Avenal	1	Santa Maria	2
		Wasco	1	Lompoc	2
		Taft	2	Total	29
		Bakersfield	3	<u>North Coast</u>	
		Total	29	San Rafael	2
		<u>Sacramento Valley</u>		Petaluma	1
		Fairfield	1	Santa Rosa	2
		Winters	1	Ukiah	2
		Woodland	2	Lakeport	1
		Auburn	1	Calistoga	1
		Grass Valley	1	Napa	2
		Marysville	2	Vallejo	2
		Williams	1	Concord	1
		Willows	1	Livermore	1
		Oroville	1	Total	15
		Chico	2		
		Orland	1		
		Corning	1		
		Red Bluff	2		
		Redding	2		
		Dunsmuir	1	Grand Total	117
		Total	20	(for 79 cities)	



Data Collection: Four fieldmen devoted full time to gathering the data needed for this study. On each visit to a retail store the field representative secured (for each commodity included in the study<sup>1/</sup>) information on: (1) the volume of last week's sales, (2) last week's loss due to waste and spoilage, (3) the purchase and selling price of the produce being displayed, and (4) the source of the store's supplies. The data supplied on last week's sales and loss were used to determine the spoilage factor and the relative weights to be attached to each store in the computation of weighted averages. Information on prices and sources of supply was utilized for determining gross margins of retailers and dealers and for indicating channels of distribution.

Retailers specified dealers from whom current supplies of fresh fruits and vegetables were secured. These dealers were interviewed to obtain information on their own prices and sources of supply. Suppliers of the first dealers, were then contacted to ascertain their prices and sources. This same procedure was repeated until the grower source was reached or until sources were traced back as far as possible. In the majority of cases the original source in the producing area could be ascertained.

By following the movement of each lot of supplies from the retail store back to the original producer it was possible to double check the prices reported at the various points of the distributive system and to consider prices for individual lots. Where identity of the individual lot could not be retained, prices were obtained for the commodity, of a similar quality, handled on the same day as that on which the lot in question was handled. Not much substitution of this type was necessary except where dealers made mistakes in recalling their sources of supply. Thus, margins (the differences between selling and purchase prices) could be determined directly for individual transactions without using average market prices.

Weighting System: The individual schedules provided the mass of information from which inferences were to be drawn regarding marketing channels and margins prevailing for California-produced fresh fruits and

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<sup>1/</sup> The eleven commodities included were fresh asparagus, cantaloup, carrots, celery, grapes, lettuce, oranges, peaches, pears, potatoes, and tomatoes.



vegetables sold within the state. It was desired to show this information by geographic location, city size, store size, and store type. For this purpose the data from individual schedules were combined into average prices, average margins, average spoilage losses, etc., in two ways. The initial step consisted of summarizing the data for all visits within each subgroup (for example, large grocery stores in Metropolitan San Francisco) using "last week's" sales as weights. In merging the original groups into larger groups (for example, all retail stores in Northern California), the weights used were estimated retail sales of all fresh fruits and vegetables during 1948.

The latter weights were secured on the basis of the distribution of California population in 1948 (as estimated by the U.S. Bureau of the Census) and on the distribution of sales of fresh fruits and vegetables among different store sizes and store types as obtained from the 1939 census of retail trade.<sup>1/</sup>

The percentage weights determined in this manner are shown in table A-2. It is estimated that in 1948 total California retail sales of fresh fruits and vegetables (exclusive of the area east of the Sierra Nevada Mountains) are distributed almost equally between Northern and Southern California (48.7 vs. 51.3 per cent). In Southern California 65 per cent of total sales occurs in large cities and 35 per cent in small cities compared to 46 and 54 per cent, respectively, in the northern portion of the state. A slightly larger volume of fresh fruits and vegetables is sold in small stores than in large stores located in the small cities of the state. In the large cities, especially in Southern California, however, a considerably smaller total volume of sales occurred in small stores.

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<sup>1/</sup> This determination was made in the following way:

1. Sales of fresh fruits and vegetables for the various geographic areas and certain store types (see Appendix B) in 1939 were converted to a per capita basis.
2. The estimated 1948 population for California was distributed among these areas according to the 1947 population distribution.
3. Dollar sales in 1948 were determined using the above information and assuming that retail prices in California increased during the decade (1939-1948) in the same ratio as U.S. prices, that per capita physical consumption remained unchanged, and that 1939 percentage distributions by store size and store type were applicable to 1948.





TABLE A-2

Estimated Distribution<sup>a/</sup> of Fresh Fruits and Vegetables Sold at Retail, California, 1948

City size and area b/ 1	Large stores b/ 2			Small stores b/ 5	All stores 6
	grocery	fruit and vegetable	all		
	2	3	4	5	6
	per cent of sales in Southern California c/				
<u>Large cities</u>					
Metropolitan Los Angeles			34.1	21.7	55.8
San Bernardino and San Diego			5.8	3.7	9.5
Total	17.2	22.7	39.9	25.4	65.3
<u>Small cities</u>					
Imperial and Coachella Valleys			.5	.5	1.0
Balance of Southern California			15.8	17.9	33.7
Total			16.3	18.4	34.7
<u>All cities</u>			56.2	33.8	100.0
	per cent of sales in Northern California c/				
<u>Large cities</u>					
Metropolitan San Francisco and San Jose	8.6	13.6	22.2	17.1	39.3
Sacramento	}	2.3	.6	2.9	2.8
Stockton and Fresno					3.7
Total	10.9	14.2	25.1	20.7	45.8
<u>Small cities</u>					
North Coast			3.1	3.6	6.7
San Francisco Bay Area (less 2 counties) d/			4.2	4.6	8.8
Santa Clara, San Benito, Santa Cruz, and Monterey Cos.			3.3	3.8	7.1
San Luis Obispo and Santa Barbara Cos.			.9	1.0	1.9
North Sacramento Valley			2.8	3.2	6.0
South Sacramento Valley			2.7	3.1	5.8
North San Joaquin Valley			3.1	3.5	6.6
South San Joaquin Valley			5.3	6.0	11.3
Total			25.4	28.8	54.2
<u>All cities</u>			50.5	49.5	100.0

a/ Based on distribution of California population in 1948 (as reported by the U.S. Bureau of Census) and on distribution of California retail sales of fresh fruits and vegetables among different types and sizes of stores (as reported by the 1939 retail census of distribution).

b/ See Appendix B for definitions of areas and of store types.

c/ It is estimated that 51.3 per cent of total sales were in Southern California and 48.7 per cent in North Calif.

d/ Excluding Santa Clara and San Benito counties.



1. The following table shows the results of the survey.

2. The results of the survey are as follows: The first group of respondents, consisting of 100 persons, was asked to rate the importance of various factors in their decision to purchase a new car. The factors were rated on a scale of 1 to 5, with 1 being the least important and 5 being the most important. The results are shown in the table below.

Factor	Rating				
	1	2	3	4	5
Price	10	20	30	20	10
Performance	5	15	35	30	15
Reliability	5	15	35	30	15
Appearance	10	20	30	20	10
Comfort	5	15	35	30	15
Convenience	5	15	35	30	15
Availability	10	20	30	20	10
Service	5	15	35	30	15
Warranty	5	15	35	30	15
Brand Name	10	20	30	20	10
Resale Value	5	15	35	30	15
Environmental Impact	5	15	35	30	15
Overall Satisfaction	5	15	35	30	15

3. The results of the survey are as follows: The second group of respondents, consisting of 100 persons, was asked to rate the importance of various factors in their decision to purchase a new car. The factors were rated on a scale of 1 to 5, with 1 being the least important and 5 being the most important. The results are shown in the table below.

4. The results of the survey are as follows: The third group of respondents, consisting of 100 persons, was asked to rate the importance of various factors in their decision to purchase a new car. The factors were rated on a scale of 1 to 5, with 1 being the least important and 5 being the most important. The results are shown in the table below.

Distribution Channels: Three factors were expected to affect the source from which a retailer secured his supplies. Accordingly the sample stores were classified into 25 groups based on size of stores as measured by 1948 sales of fresh fruits and vegetables, the size of the city in which the store operates, and the geographic area where it is located.

For each category an estimate was made of the proportion of retailer's supplies coming from different sources (dealer or geographic). This estimate was obtained by recording the source of supply for the lot found in the retail store sampled on the day of the interview and weighting this source by last week's sales. It is believed that no significant error is introduced by this procedure, which assumes that there is no significant variation in the sources used by a retailer over the period of one week--even though a considerable change may occur over longer periods of time. Channel percentages leading to each dealer type (for example, wholesaler or truck-jobber) that is, for stages preceding the retail level, were obtained in a similar manner. This procedure was followed backwards in the marketing process until the original producer sources were encountered.

These data provide information for showing the relative volume of the commodity ultimately sold at retail which was handled by different dealer types. Average percentages for Southern California and for Northern California were computed using the weights specified in table A-2. The resulting composite figures were used in preparing the charts on marketing channels shown in figure 1 of the text. Tables 1, 2, 5, and 6 indicate the relative importance of different dealer types and of various producing areas in supplying retail stores in large and small cities of the three major California regions.

Marketing Margins: In classifying the sample stores into subgroups for purposes of deriving marketing margins the grouping used was different from that adopted for determining distribution channels. Larger geographic areas were established. The number of subgroups was increased, however, by making a further breakdown of large stores into grocery stores and fruit and vegetable stores and by classifying each store as an independent or a chain store and according to whether or not it offered some credit or delivery service.



Average retail prices, retail margins, and spoilage losses for the various subgroups were determined by combining the data obtained from the several individual store interview schedules for each category using "last week's" sales as weights. Table A-3 presents these results for all the groups together with the number of store visits and the volume reported. Data are also given for all store types in California, Southern California, and Northern California. These data are summarized for broader store groupings in table 8 of the text. Where larger categories of stores were established by merging the data for the original groups the percentage weights listed in table A-2 were used.

The gross margin for each dealer was taken to be the difference between his selling price (f.o.b. his premises) and his purchase price (delivered to his premises). Where the dealer performed the transportation himself a deduction for the estimated amount of the transportation cost was made. In addition, any brokerage fees paid were considered to be part of the wholesaler's margin. This procedure was followed in order to secure comparability as between wholesalers who employed independent brokers and those who employed their own salesmen.

Estimates of packing and container charges were obtained through personal interviews with growers, grower-shippers, and packers whose names were given in the tracing-back process previously described. "Farm production" is considered to include all costs up to the point where the commodity is brought to the farm gate or packing house door in a prepacked condition. Marketing costs are those expenses incurred subsequently. Harvesting costs, therefore, are considered to be an item of production costs. Where picking was performed by the party doing the packing an estimate for picking costs was made.

From these data it is possible to estimate the main cost components incurred in moving fresh produce from the grower to the consumer. This information is shown in the text by table 7 and figure 3. Tables 9 and 10 of the text summarize data on the wholesaling margin and on packing and container costs.



TABLE A-3

Spoilage Loss, Retail Price and Retail Margin for Lettuce Sold at Retail,  
by Store Type and Area, California, 1948-1949

Store type and area a/	Store visits b/	Volume reported c/	Average spoilage loss d/	Average retail price	Retail margin	
					average e/	as per cent of price f/
1	2	3	4	5	6	7
	number	crates	per cent	cents per pound		per cent
<u>All store types</u>						
California	2,161	31,435	9.2	11.8	4.0	34
Southern California	624	11,667	10.0	11.6	3.7	32
Northern California	1,537	19,768	8.2	12.0	4.3	36
<u>Metropolitan Los Angeles, San Bernardino, and San Diego</u>						
Credit or delivery	143	1,163	8.7	12.9	4.8	37
Cash and carry	258	7,253	8.9	11.8	4.0	33
Large-grocery	214	5,981	8.5	12.3	4.3	35
Large-fruit and vegetable	77	2,034	9.6	10.9	3.5	32
Small-all types	110	401	10.7	12.2	4.3	35
<u>Metropolitan San Francisco and San Jose</u>						
Credit or delivery	129	1,723	7.3	13.6	5.9	43
Cash and carry	264	7,045	9.2	10.6	4.6	44
Large-grocery	75	2,939	9.5	9.5	3.5	37
Large-fruit and vegetable	231	5,178	8.5	12.1	5.8	48
Small-all types	87	651	8.4	11.8	4.5	38
<u>Sacramento, Stockton, and Fresno</u>						
Credit or delivery	91	918	6.2	11.7	3.5	30
Cash and carry	187	2,467	7.8	10.4	3.1	30
Large-grocery	91	1,932	3.3	9.8	2.7	27
Large-fruit and vegetable	30	497	16.6	11.7	3.3	28
Small-all types	157	956	9.1	12.3	4.4	36
<u>Small cities--Southern California</u>						
Credit or delivery	92	575	10.2	12.5	3.6	29
Cash and carry	131	2,676	9.0	10.1	2.9	29
Large	154	2,988	9.0	10.3	3.0	29
Small	69	263	11.4	12.2	3.2	26

Continued--





Table A-3 Continued.

Store type and area <u>a/</u>	Store visits b/	Volume reported c/	Average spoilage loss d/	Average retail price	Retail margin	
					average e/	as per cent of price f/
1	2	3	4	5	6	7
	number	crates	per cent	cents per pound		per cent
<u>Small cities--North and Central Coast</u>						
Credit or delivery	187	1,434	8.1	13.0	4.5	35
Cash and carry	114	1,140	8.3	12.8	4.7	37
Large-North Coast	64	638	9.2	13.3	4.3	32
Large-Central Coast	112	1,166	7.4	13.4	5.2	39
Small-North Coast	38	272	10.8	13.0	4.1	32
Small-Central Coast	87	498	7.2	11.4	3.9	34
<u>Small cities--Sacramento and San Joaquin Valleys</u>						
Credit or delivery	389	2,825	6.9	12.2	3.8	31
Cash and carry	176	2,216	7.7	11.9	3.7	31
Large-Sacramento Valley	145	1,510	6.8	11.8	3.6	30
Large-San Joaquin Valley	176	2,340	7.7	12.2	3.8	31
Small-Sacramento Valley	98	417	7.0	13.5	4.5	33
Small-San Joaquin Valley	146	774	7.1	11.7	3.7	32
<u>Independent credit-delivery stores</u>						
Southern California	235	1,738	9.2	12.8	4.4	34
North and Central Coast	308	3,032	7.4	13.3	5.3	40
Sacramento and San Joaquin Valleys	437	3,465	6.6	12.1	3.8	31
<u>Independent cash-carry stores</u>						
Southern California	320	6,927	9.2	11.1	3.5	32
North and Central Coast	348	5,882	8.6	11.9	5.2	44
Sacramento and San Joaquin Valleys	340	4,151	7.7	10.9	3.3	30
<u>Local chain stores</u>						
Southern California	69	3,002	8.3	12.0	4.0	33
North and Central Coast	38	2,428	10.9	8.8	3.3	38
Sacramento and San Joaquin Valleys	65	780	8.1	12.1	3.9	33

a/ See Appendix B for definition of store types and areas.

b/ Number of usable field schedules collected on separate visits to retail stores (excluding reports with inadequate data and visits which indicated that no lettuce was sold).

c/ Quantity sold during the "last week" (i.e., the week prior to the date of fieldman's visit).

d/ Proportion of lettuce thrown away during the week due to waste or spoilage.

e/ The difference between the retail selling price and the retailer's purchase price.

f/ Computed from unrounded figures and may differ from col (6) divided by col (5).

1. The following are the names of the persons who have been appointed to the various positions in the organization of the National Association of Manufacturers, Inc., for the year 1914.

2. The following are the names of the persons who have been appointed to the various positions in the organization of the National Association of Manufacturers, Inc., for the year 1914.

3. The following are the names of the persons who have been appointed to the various positions in the organization of the National Association of Manufacturers, Inc., for the year 1914.

Position	Name	Address	City	State	Year
President	John D. Rockefeller	100 Wall Street	New York	N.Y.	1914
Vice President	John D. Rockefeller	100 Wall Street	New York	N.Y.	1914
Secretary	John D. Rockefeller	100 Wall Street	New York	N.Y.	1914
Treasurer	John D. Rockefeller	100 Wall Street	New York	N.Y.	1914
Executive Committee	John D. Rockefeller	100 Wall Street	New York	N.Y.	1914
Board of Directors	John D. Rockefeller	100 Wall Street	New York	N.Y.	1914
Advisory Board	John D. Rockefeller	100 Wall Street	New York	N.Y.	1914
Committee on Finance	John D. Rockefeller	100 Wall Street	New York	N.Y.	1914
Committee on Legislation	John D. Rockefeller	100 Wall Street	New York	N.Y.	1914
Committee on Public Relations	John D. Rockefeller	100 Wall Street	New York	N.Y.	1914
Committee on Education	John D. Rockefeller	100 Wall Street	New York	N.Y.	1914
Committee on Labor	John D. Rockefeller	100 Wall Street	New York	N.Y.	1914
Committee on Social Work	John D. Rockefeller	100 Wall Street	New York	N.Y.	1914
Committee on Foreign Affairs	John D. Rockefeller	100 Wall Street	New York	N.Y.	1914
Committee on International Trade	John D. Rockefeller	100 Wall Street	New York	N.Y.	1914
Committee on Transportation	John D. Rockefeller	100 Wall Street	New York	N.Y.	1914
Committee on Communications	John D. Rockefeller	100 Wall Street	New York	N.Y.	1914
Committee on Energy	John D. Rockefeller	100 Wall Street	New York	N.Y.	1914
Committee on Agriculture	John D. Rockefeller	100 Wall Street	New York	N.Y.	1914
Committee on Forestry	John D. Rockefeller	100 Wall Street	New York	N.Y.	1914
Committee on Fisheries	John D. Rockefeller	100 Wall Street	New York	N.Y.	1914
Committee on Mining	John D. Rockefeller	100 Wall Street	New York	N.Y.	1914
Committee on Manufacturing	John D. Rockefeller	100 Wall Street	New York	N.Y.	1914
Committee on Commerce	John D. Rockefeller	100 Wall Street	New York	N.Y.	1914
Committee on Finance	John D. Rockefeller	100 Wall Street	New York	N.Y.	1914
Committee on Legislation	John D. Rockefeller	100 Wall Street	New York	N.Y.	1914
Committee on Public Relations	John D. Rockefeller	100 Wall Street	New York	N.Y.	1914
Committee on Education	John D. Rockefeller	100 Wall Street	New York	N.Y.	1914
Committee on Labor	John D. Rockefeller	100 Wall Street	New York	N.Y.	1914
Committee on Social Work	John D. Rockefeller	100 Wall Street	New York	N.Y.	1914
Committee on Foreign Affairs	John D. Rockefeller	100 Wall Street	New York	N.Y.	1914
Committee on International Trade	John D. Rockefeller	100 Wall Street	New York	N.Y.	1914
Committee on Transportation	John D. Rockefeller	100 Wall Street	New York	N.Y.	1914
Committee on Communications	John D. Rockefeller	100 Wall Street	New York	N.Y.	1914
Committee on Energy	John D. Rockefeller	100 Wall Street	New York	N.Y.	1914
Committee on Agriculture	John D. Rockefeller	100 Wall Street	New York	N.Y.	1914
Committee on Forestry	John D. Rockefeller	100 Wall Street	New York	N.Y.	1914
Committee on Fisheries	John D. Rockefeller	100 Wall Street	New York	N.Y.	1914
Committee on Mining	John D. Rockefeller	100 Wall Street	New York	N.Y.	1914
Committee on Manufacturing	John D. Rockefeller	100 Wall Street	New York	N.Y.	1914
Committee on Commerce	John D. Rockefeller	100 Wall Street	New York	N.Y.	1914

## APPENDIX B: DEFINITION OF TERMS

Two metropolitan areas are set up to include the cities of Los Angeles and San Francisco with their surrounding environments. The portion of California east of the Sierra Nevada Mountains (Alpine, Mono, and Inyo counties) was excluded from the study. The remainder of the state is divided into two major regions--Southern California and Northern California--by the Tehachapi Mountains. Northern California is further subdivided into two sub-regions of seven areas.

An arbitrary distinction is drawn between grower-shippers and growers. A "dealer" is defined so as to exclude retailers, producers, brokers, and common carriers. Four dealer categories are established--packers, wholesalers, truckers, and truck-jobbers.

Retail stores are classified according to volume of fresh fruits and vegetables sold, line of commodities handled, kind of business organization, and whether credit and delivery services are offered.

The precise definitions adopted for this study are listed below under three classifications.

### GEOGRAPHIC AREAS

Metropolitan Los Angeles: The cities of Los Angeles, Pasadena, Burbank, Glendale, Santa Monica, and Long Beach.

Metropolitan San Francisco: The cities of San Francisco, Oakland, Berkeley, Richmond, and Alameda.

Large Cities: Cities with 50,000 or more inhabitants in 1948.

Small Cities: Cities with less than 50,000 inhabitants in 1948.

Southern California: The portion of California lying south of the Tehachapi Mountains and east of Santa Barbara County, but including the city of Santa Barbara and immediate environments--that is, including the seven counties of Ventura, Los Angeles, San Bernardino, Riverside, Orange, San Diego, and Imperial, and the city of Santa Barbara and its immediate environments.

Northern California: The portion of California lying north of the Tehachapi Mountains and west of Ventura County, but excluding the counties of Alpine, Mono, and Inyo and the city of Santa Barbara and immediate environments--that is, all of the state lying outside the area defined as Southern California, except the counties of Alpine, Mono, and Inyo which are excluded from the study. Northern California includes two sub-regions: Coastal Northern California (Central Coast, North Coast and San Francisco Bay Area) and the Central Valley (Sacramento Valley and San Joaquin Valley).

Central Coast: The four counties of Santa Cruz, Monterey, San Luis Obispo, and Santa Barbara, but excluding the city of Santa Barbara and immediate environments.



North Coast: The eight counties of Marin, Sonoma, Napa, Lake, Mendocino, Trinity, Humboldt, and Del Norte.

San Francisco Bay Area: The six counties of San Francisco, San Mateo, San Benito, Santa Clara, Alameda, and Contra Costa, and the city of Vallejo.

South Sacramento Valley: The five counties of Solano (excluding the city of Vallejo), Yolo, Sacramento, El Dorado, and Placer.

North Sacramento Valley: The thirteen counties north of South Sacramento Valley and east of North Coast.

South San Joaquin Valley: The five counties of Kern, Kings, Tulare, Fresno, and Madera.

North San Joaquin Valley: The seven counties of Merced, Stanislaus, San Joaquin, Mariposa, Tuolumne, Calaveras, and Amador.

#### DEALER TYPES

Grower: A producer who is actually engaged in growing operations on land (either owned or rented) where the commodity is produced and who does not operate a permanent packing shed. (He may pack produce by means of temporary facilities.)

Grower-Association: A cooperation association established for the purpose of marketing or processing fresh fruits and vegetables produced by grower members. (A group of growers working together in harvesting and marketing a crop and jointly sharing in the receipts is considered a grower-association, even though a formal association has not been legally established. As a guide, the field work was conducted subject to the rule that the informal group must include at least 10 producer members before it was classed as a grower-association.)

Grower-Shipper: A producer who also operates a permanent packing shed and who grows more than 50 per cent of the produce packed in this shed. (Usually a grower-shipper is a large producer.)

Retailer: A person whose principal business is to sell to individual consumers, but excluding any producer who sells directly to consumers, except where such producer has an established retail outlet which is his major business.

Broker: An agent who does not have title to or physical control of the produce, but who negotiates sales and receives a brokerage or commission fee.

Dealer: A person whose principal business is to buy produce on his own account or to receive produce on consignment and to sell it to others, except individual consumers. (This is a general term intended to include packers, wholesalers, truckers, and truck-jobbers and to exclude retailers and producers, and also brokers and common carriers who do not take title to produce.)

THE UNIVERSITY OF CHICAGO  
CHICAGO, ILL.

TO THE PRESIDENT OF THE UNIVERSITY OF CHICAGO  
AND THE FACULTY OF THE DIVISION OF THE PHYSICAL SCIENCES

IN RESPONSE TO A RESOLUTION PASSED BY THE FACULTY OF THE DIVISION OF THE PHYSICAL SCIENCES  
ON APRIL 10, 1957

BY THE PRESIDENT OF THE UNIVERSITY OF CHICAGO  
AND THE FACULTY OF THE DIVISION OF THE PHYSICAL SCIENCES

ON APRIL 10, 1957

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CHICAGO, ILL.

TO THE PRESIDENT OF THE UNIVERSITY OF CHICAGO  
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BY THE PRESIDENT OF THE UNIVERSITY OF CHICAGO  
AND THE FACULTY OF THE DIVISION OF THE PHYSICAL SCIENCES

ON APRIL 10, 1957

THE UNIVERSITY OF CHICAGO  
CHICAGO, ILL.

TO THE PRESIDENT OF THE UNIVERSITY OF CHICAGO  
AND THE FACULTY OF THE DIVISION OF THE PHYSICAL SCIENCES

IN RESPONSE TO A RESOLUTION PASSED BY THE FACULTY OF THE DIVISION OF THE PHYSICAL SCIENCES  
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Packer: A dealer who assembles, packs, processes, loads, and/or ships produce, the major portion of such produce being bought from growers or handled for their account. (Usually he operates a permanent packing shed. If a party grows more than 50 per cent of the produce packed, he is classified as a Grower, Grower-Association, or Grower-Shipper and not as a Packer.)

Wholesaler: A dealer whose principal business is to receive produce, store it, and resell it to others at an established place of business. (He may buy either from growers or other dealers and may sell either to retailers or other dealers. He may perform delivery service but must have an established place of business. If a dealer has no such facilities, he is classified as a Truck-Jobber.)

Truck-Jobber: A dealer who buys primarily from wholesalers, carries a wide variety of items per truckload, and sells only to retailers at their door. (He may have storage facilities but does not sell on established premises. Usually a regular truck route is followed.)

Trucker: A dealer whose principal business is to buy produce in producing areas, transport it, and resell it either to retailers or other dealers. He handles only a few items per truckload. (He may operate a fleet of trucks. If a party does not buy the produce outright or take it on consignment, he is not considered a dealer but as a person hired to perform transportation services.)

#### STORE TYPES

Large store: A retail store with sales of fresh fruits and vegetables amounting to over \$25,000 during 1948.

Small store: A retail store with sales of fresh fruits and vegetables amounting to \$25,000 or less during 1948.

Fruit and vegetable store: A retail store whose principal business is to sell produce. (It may be a fruit and vegetable stand or store, or a leased department in a supermarket. The classification is according to management and operation and not building.)

Grocery store: Any other retail store handling fruits and vegetables.

Local Chain store: A single store unit of a group of retail stores, local to the area, centrally owned and with some degree of centralized control of operation. (Stores of national chain systems are excluded.)

Independent store: A retail store which is controlled by its own individual ownership or management rather than from without. (This designation refers to retail stores which are not units of national or local chain store systems.)

Credit-delivery store: A retail store offering credit and/or delivery services to its customers in connection with the sale of goods.

Cash-carry store: A retail store offering neither credit nor delivery services to its customers.



